FOLLOWING THE FRONTIER

W·L·NIDA

~~J. A. Klingaman~~
Loy Fisel

Loy Fisel

This book belongs
to
~~John A. Klingaman~~
Loy Fisel

FOLLOWING THE FRONTIER

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TORONTO

Following the Frontier

STORIES OF THE WESTWARD MOVEMENT

BY

WILLIAM L. NIDA

AUTHOR OF "THE DAWN OF AMERICAN HISTORY,"
"CITY, STATE, AND NATION,"
"FOLLOWING COLUMBUS,"
ETC.

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PREFACE

There was a time when to study American history meant to study only our political and military annals. We even tried to adapt these phases of our country's story to beginners in the fifth and sixth grades. This effort resulted in failure because the material was outside the experience and interest of the children.

We next turned to biography for a simple introduction of history in the intermediate grades; but in attempting to give our young people biography we found that, save in the lives of the explorers, the things that made most of our historical characters great were so bound up with political history that these stories, when shorn of facts not intelligible to the child, were only superficial sketches not worthy to be called biography.

We have therefore come to the conclusion that the ideal material for an intermediate text is found in the social and industrial life of colonial and pioneer days. The pioneer's home, his food and drink, his manners and dress, as well as his occupations, commerce, and modes of travel, are all deeply interesting to children. Moreover, we are awakening to the fact that the social and industrial history of our country is quite as important for study as the political and military.

Every section of our land has had its pioneer days and we have, therefore, made the great westward movement the backbone of this intermediate text, thus giving a complete story of certain important phases of our national growth and connecting these developments with state history.

It is generally admitted that the great westward movement is the most characteristic, and perhaps the most important, in our national story, and when we link with it a vivid description of the social and industrial life of the pioneer, we have a unit of history and, at the same time, material so interesting to youth that we do not have to "write down" to him, but may tell the whole story in a dignified fashion, sure of his understanding and appreciation.

We have long believed that the study of United States geography would be far more intelligible to our pupils if they had with it a connected story of the settlement of the country, a complete narrative of the movement west over the mountain barriers and along the rivers, until our boundaries reached the Pacific coast. In other words, history and geography may both be more effectively taught when they are correlated. Here at last is a history text that will correlate with the geography of our country; and it is suitable for the fifth, sixth, or seventh grade.

W. L. N.

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PART ONE

WESTWARD UNDER FRANCE AND ENGLAND

FOLLOWING THE FRONTIER

CHAPTER I

INTRODUCTION — THE AMERICAN PIONEER

A wild continent. Three hundred years ago the great country in which you now live was a wilderness, a vast uncultivated land of forests and prairies, of mountains and valleys and deserts. There were no cities or towns or farmhouses, no fruitful orchards nor productive wheat fields; there were only pathless plains and trackless forests. Instead of the honk of the automobile and the whistle of the locomotive and factory, one might have heard the hoot of the owl, the gobble of the wild turkey, the scream of the panther, and the howl of the wolf.

Over the plains where we pasture domestic animals and raise magnificent crops of grain, herds of buffalo held sway; and only wild fowl and occasional Indian canoes frequented the streams which are now great avenues of commerce. In all the broad land from the Atlantic to the Pacific there dwelt only a few scattered tribes of red men — no more than enough, had they been gathered together, to make a city the size of St. Louis.

Three hundred years may seem to you a long time, but after all it is a very short period in which to trans-

form so far-reaching a wilderness into the civilized land it is to-day, with its thousands of splendid cities and towns connected by railroads, bridges, canals, and telephones.

A long journey. The story of how this change came about is the story of the American Pioneer, which we

From an old print

IN THE WILDERNESS

wish to tell you. Perhaps some day much of this will be given you by moving pictures; but until then you will need the help of your imagination. We should like to take you with us on a long journey, for we know you all like to travel.

By this time you may have read in *Following Columbus* the story of the first white settlements in America. In our journey we shall follow the pioneer from these first settlements, in his dangerous and difficult

march from the Atlantic to the Pacific Ocean. We shall follow him into the forest to hunt the deer and the bear, and upon the plains to kill the buffalo. We shall help him to make his moccasins and other clothing of deerskin. We shall carry his ax for him to the clearing and lend a hand in lifting logs to build his cabin. We shall eat with him, dining on hoecakes and bear meat, cooked at the stone fireplace. There will be bloody encounters with Indians as they are driven before the pioneer on his westward march. We shall float down the Mississippi to New Orleans on a flatboat. There will be canals to dig and steamboats to build. We shall go with the explorers up the Missouri and across the Rockies to the Oregon country and back. Then we shall jog along with the goldseekers to California, where in '49 many became suddenly rich. And last of all, we shall help to build the Union Pacific Railroad across the mountains, and we shall set the poles for the telegraph wires which reach from the Atlantic to the Pacific and bind our great land into one nation.

It is a long, long journey, but an interesting one. Now, if you are ready to start, we shall join the first white settlers along the wild shores of the Atlantic Ocean.

CHAPTER II

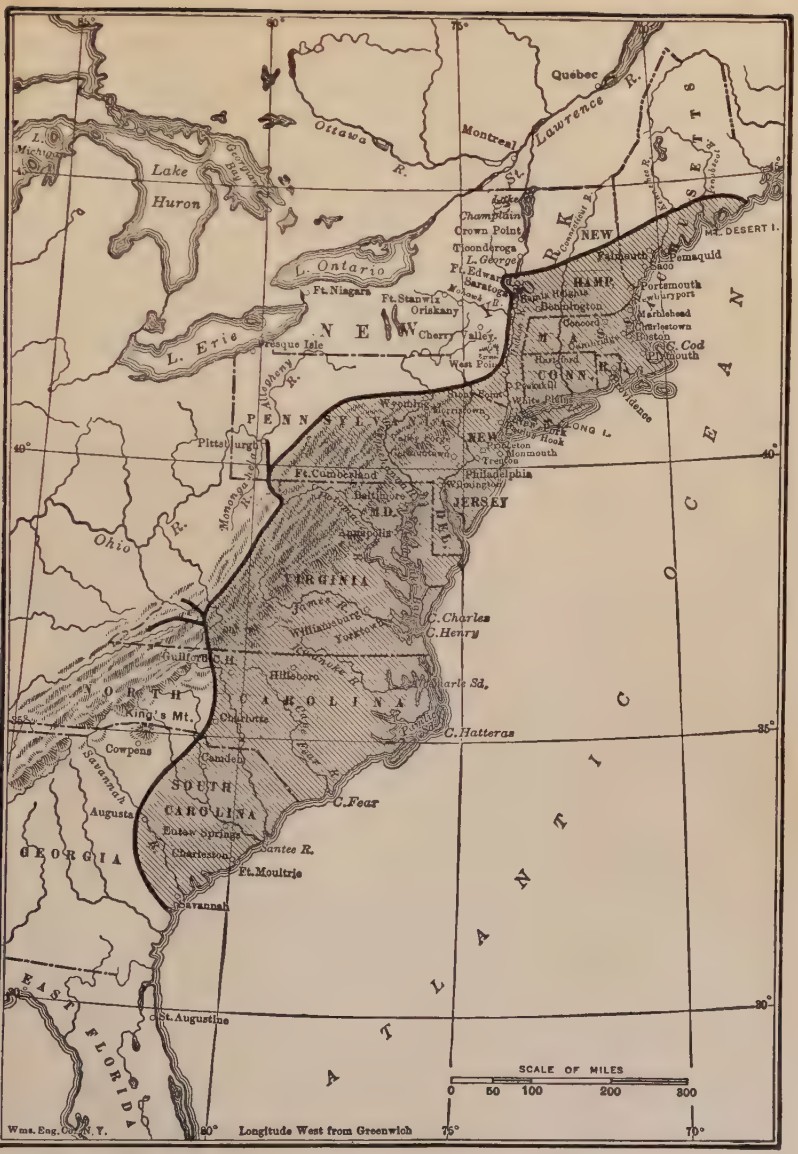
THE COMING OF THE FIRST WHITE SETTLERS

New England. In *Following Columbus*, the story is told of how the English, Dutch, and French spread colonies along the Atlantic coast. The Pilgrims, who

From an old print

THE ENGLISH SETTLERS OF AMERICA SUFFERED MANY HARDSHIPS

wanted to find a place where they could worship God in their own way, came to the cold, rocky shores of New England and settled at Plymouth. They suffered much from hunger and the severe cold of winter, but they bravely held out and learned from the Indians



THE COLONIES AND THE EXTENT OF SETTLEMENT ON THE EVE OF THE REVOLUTION

how to feed their families by raising corn and by fishing. Thousands of other Englishmen brought their families and their cows, horses, sheep, and pigs, and built homes on the same shores. They, too, lived on their scanty crops and the good fishing along the coast.

After a while they learned how to use the fine forests of New England to help them along, for they were soon building ships and selling lumber, tar, and other forest products, as well as fur, to the people of the old world, where forests were scarce. In spite of the severe winters and the poor soil of New England, the people kept coming, and their settlements were finally scattered along all the harbors and rivers of this wilderness country.

Virginia and Maryland. You remember, too, how other Englishmen sailed their ship up the James River in Virginia and built their cabins at a place which they named Jamestown. They had a dreadful time before they were firmly established. A great many starved to death and some were killed by the Indians. When Captain John Smith took charge of the colony, he made the settlers go to work raising crops, else they all would have starved. After some years of bitter experience, the Jamestown colony learned to support itself by raising corn and tobacco. The settlers found that they could sell in England all the tobacco they could raise, and with the money buy supplies to bring back to their Virginia plantations. Presently, they were working hard clearing away the forests along the rivers to make larger and larger tobacco farms.

Some years later Lord Baltimore brought over his Catholic friends and settled north of the Potomac River, naming his colony Maryland. His people learned from the people of Virginia how to support their families by raising corn and tobacco.

New York and the Dutch. The Dutch, by good fortune, found the best harbor on the coast and here at New York built their first city. They did not suffer so much as the first English colonists. They were shrewd in buying and selling and soon built up a fine fur trade with the Indians. These furs were wanted in Europe, and the Dutch grew rich buying them for very little and selling them at a good price across the sea. Soon the Dutch had settled at many places along the Hudson and were doing well, but after a time a war arose between England and Holland and the colony on the Hudson passed into the hands of the English.

Penn and the Quakers. The noble William Penn sent his Quaker families to the forests of Pennsylvania, where he soon joined them and built a city at Philadelphia. This was many years after the trials and sufferings of Jamestown and Plymouth. The Quakers readily got a good foothold. They made friends with the Indians and were soon raising good crops of corn, wheat, and garden vegetables. The Quaker colony grew rapidly and the newcomers spread along the river valleys until Pennsylvania was the richest of all the colonies and the most populous.

The Carolinas and Georgia. Farther south were Georgia and the Carolinas, where the settlers got a

start without much suffering. The climate was not severe and crops grew easily. Their best products for selling in Europe were rice and indigo, except in North Carolina, where tobacco and forest products were relied upon. Every colony faced hunger and hardship until it found a crop which it could sell to the mother county and for which it could get in return what it needed.

Now after about a hundred years of colony planting, we find England with thirteen colonies along the American coast from Maine to Florida, but the settlers have not gone far inland.

Questions and Problems

1. Debate the question as to whether you would have preferred to live in a colony in New England or in one in Virginia.
2. Debate the same question in regard to New York and Georgia.
3. Debate the same question in regard to Pennsylvania and the Carolinas.

Books to Read

Barstow, C. L. — *Explorers and Settlers*, pp. 145–219; The Century Company.

Beard, C. A., and Bagley, W. C. — *The History of the American People* (Revised Edition), pp. 50–80; The Macmillan Company.

Elson, H. W., and MacMullan, C. E. — *The Story of Our Country*, pp. 39–129; Johnson, Blagden & McTurnan.

FISHER, S. G. — *The Quaker Colonies;* Yale University Press.

HODGDON, J. R. — *A First Course in American History,* pp. 78–222; D. C. Heath and Company.

NIDA, W. L. — *Following Columbus;* The Macmillan Company.

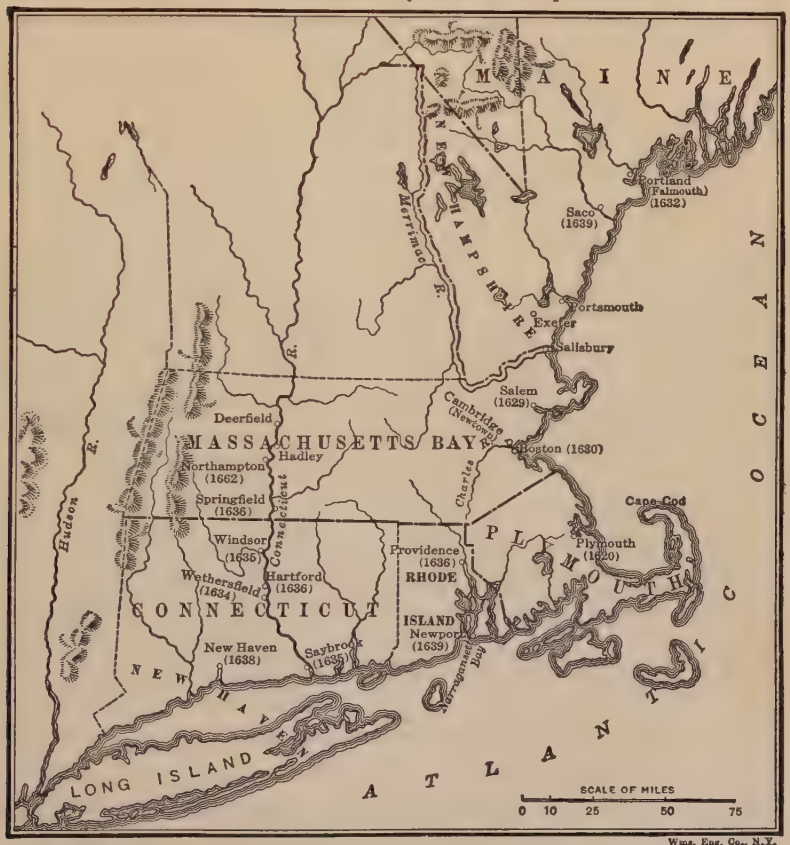
CHAPTER III

PUSHING BACK THE FRONTIER LINE

New England. As the early settlers of the English colonies had occupied the most desirable farm lands and home sites close to the rivers or the sea, those who came later were forced to go farther inland. Thus newcomers to New England kept pushing toward the mountains, but were afraid to go far into the back country to found homes, on account of hostile Indians. For many years, the Frenchmen of Canada and their Indian friends were lurking along the border settlements of New England ready to burn any unprotected cabin or village and kill the inhabitants.

In 1689, an Indian war party, stirred up by the French, attacked the little village of Dover in New Hampshire, and slew and scalped a large number of the people. A little later another frontier settlement in Maine suffered the same fate. During the next winter a war party attacked the town of Schenectady in the dead of night, and killed the men, women, and children. The village of Deerfield, Massachusetts, was one day surprised by the red men and a number of its inhabitants killed. Many a lonely cabin in New England and New York suffered terribly from these Indian scalping parties.

However, families pushed slowly up the rivers and westward to build homes on the lonely frontiers. In the course of one hundred years the pioneers of New



EARLY NEW ENGLAND SETTLEMENTS

England had moved as far back into the forests as the New York line. Practically all of Massachusetts and Connecticut was sprinkled with clearings and cabins.

New York. The Dutch and English along the Hudson were kept from spreading westward by the same French and Indian raids that threatened the New England outposts. It would have been an easy matter to extend the settlements westward up the Mohawk Valley, where there were no mountains in the way and where it was easy to travel by water. But here in New York dwelt the powerful Iroquois tribes, who naturally objected to giving up their fertile lands to the white people. So it took nearly fifty years for the frontier settlements of New York to reach as far west as Utica.

The Middle Colonies. In the western part of Pennsylvania, Virginia, and North Carolina, the Indians were less troublesome and there were, as yet, no Frenchmen to block the westward way. So it was in these colonies that the settlers first began to move toward the west in considerable numbers.

Running northeast and southwest through these colonies are two parallel mountain ridges, the Blue Ridge on the east and the Allegheny on the west. Between these ranges is a beautiful valley stretching from Harrisburg southwestward far into Virginia. This strip of level land is known as the Great Valley. The Shenandoah River flows northward through Virginia in this valley till it empties its water into the Potomac near Harpers Ferry. This great valley has played an important part in American history, and we should do well to locate it carefully on the map.

In 1716 Alexander Spottswood, the Governor of

Virginia, decided to make a settlement in the Great Valley. He took with him a party of fifty men and pushed westward. Each day brought lively excitement in the chase of wild game, and each night was

From a photograph

HARPER'S FERRY, WHERE THE POTOMAC AND SHENANDOAH RIVERS MEET

joyous with feasting and talk and laughter around the camp fire. Spottswood entered the valley near the present site of Fort Republic. At this spot on the bank of the Shenandoah he buried a bottle in which was a paper declaring that the river and the valley belonged to the King of England.

The French at this time were busily building forts on the upper Ohio, and were pushing eastward and southward as rapidly as possible. Spottswood's plan in settling the Great Valley was to check the French from moving eastward. Following Spottswood came a few settlers from the older parts of Virginia, and these were followed later by large numbers of Scotch-Irish and Germans from Pennsylvania.

The Scotch-Irish. Many Scotch-Irish had settled in Pennsylvania. So many came to that colony that the governor at one time became alarmed, fearing they would seize the province for themselves. He said, "It looks as if all Ireland would send its inhabitants hither, for last week not less than six ships arrived." Ten thousand came in a single year. They were the best of pioneers and were soon out on the frontier, making settlements wherever they could find good vacant land. They pushed out in every direction, and a large number of them moved into the Great Valley.

The Pennsylvania Germans. Some years before this, the Rhine Valley in Germany had been overrun by the armies of France, and a half million Germans were given only a short time to get out of their country. They came to America in large numbers. A few of them settled in the Mohawk Valley, but the greater number made their way to Pennsylvania, where they founded Germantown and Lancaster. The Germans were excellent pioneers and the great forests of Pennsylvania fell rapidly before the heavy strokes of their axes. They pushed their way across the Susquehanna,

founded Harrisburg, and were presently making other settlements in the Great Valley.

In 1732, these people began to move southwestward down the valley. Crossing the Potomac, they followed the Shenandoah River, building their simple cabins and planting cornfields and orchards in the clearings. This wave of Scotch-Irish and Germans pushed on up the Shenandoah to its source and beyond until it reached the upper Yadkin Valley in North Carolina. In this way frontier settlements were planted westward beyond the Blue Ridge and across the Great Valley to the foothills and, finally, to the crest of the Allegheny range.

These westward-moving pioneers still kept in touch with the coast. From the Shenandoah Valley they carried their coarsely woven cloth, their grain, apples, and butter to the towns on the seacoast. At first they used the Indian trails through the passes and along the streams, making bridle paths of them and later building them wider for wagon roads. In other places they boldly cut their roads through the dense forests, bridging the smaller streams and ferrying across the larger ones. At the port cities they obtained articles from the other colonies and from Europe to be carried back to their lonely cabins.

Questions and Problems

1. Why were many of the settlers forced to move westward?

2. Do you think the children of that time would prefer to go west or to remain near the coast? Why?

3. How came there to be so many people of German descent in Pennsylvania?

4. Write three other questions on this chapter, beginning each with *how* or *why*. The class may decide which pupils have asked the best questions.

Books to Read

Brigham, A. P. — *From Trail to Railway*, pp. 129–141; Ginn and Company.

Semple, E. C. — *American History and Its Geographical Conditions;* Houghton Mifflin Company.

Turner, F. J. — *The Frontier of American History;* Henry Holt and Company.

CHAPTER IV

FRENCH AND ENGLISH CLAIMS CONFLICT

French and English domains. While the English now held the narrow strip of country along the Atlantic between the sea and the mountains, the French territory stretched out over more than half of the North American continent. The French claimed the land from Nova Scotia to the Pacific Ocean, and from the borders of the Hudson Bay to the Gulf of Mexico. These possessions were called New France. The valley of the St. Lawrence and the country about the Great Lakes was called Canada. The other part, which was drained by the Mississippi and which extended from the Alleghenies to the far and unknown west, was called Louisiana.

Will you now look at the map on page 18 and observe the claims of France and England? Notice how the English were almost completely shut out from the choicest portions of the continent by the Allegheny Mountains on the west. Observe also that the French held the two waterways leading to the interior. The French had not only seized the lion's share, but they had the advantage of position and the control of water travel.

The English had gone inland a bare hundred miles,

while the French outposts were more than a thousand miles from the Atlantic. Now you might suppose that this vast region which France had owned for a

FRENCH AND ENGLISH POSSESSIONS EXTENDING TO THE MISSISSIPPI RIVER

hundred years would have filled up with French people, but this was not so. There were in the New England colonies alone more than twenty times as many white people as in New France.

There was at this time very little in the western

wilderness to show that it would ever become the home of millions of people. Savage red men wandered through the woodlands and along the streams and rivers, hunting and fishing or making war upon their neighbors. The French made no effort to settle or develop the country.

French trading posts. Here and there, on the bank of a river or near some portage, there was a small settlement of French people, living quietly upon the products of the forest and their little gardens. Such settlements were to be seen at Kaskaskia in the Illinois country and later at Vincennes, on the Wabash. At each of the trading posts — Mackinac, Sault Ste. Marie, and Detroit — there was a small fort held by soldiers from France. Far apart, in the heart of the wilderness, might be found solitary huts or hunters' camps, where the French language was spoken and where fur traders sometimes found shelter. All else was unbroken wilderness.

The English interested. Now the English had also learned that large profits might be gained from the fur trade and from traffic with the Indians. There were men in most of the coast colonies who made a business of buying pelts from trappers and Indians and shipping them to England to be sold.

The settlers of New York had an easy passageway to the Great Lakes country through the Mohawk Valley. If the French were only out of the way, the entire fur trade of this boundless lake country might be brought to New York by way of Albany and the

Mohawk River, instead of passing down to Montreal and Quebec.

The Dutch and English along the Hudson. The Dutch and English along the Hudson were very friendly with the five nations of the Iroquois Indians, who dwelt between them and the Great Lakes. The English eagerly smoked the peace pipe with these red men and, at the same time, fanned their hatred for the French. The Iroquois brought the furs and other forest products which could be had in their country to the English and bartered them for beads and blankets, rum, guns, hatchets, and knives.

These savages struck terror to the hearts of the weaker tribes to the west, and as the Dutch and English traders dared not go openly among the western Indians and bid for the trade in furs, they sent these other red men into the northwest to prevail upon the natives to send their peltry to Albany. Thus the Iroquois gathered all the furs they could from the tribes on the upper lakes for the English, who could pay better prices than the French because the former did not have to divide the profits with their king.

French forts. The French were naturally jealous and determined to hold this valuable trade. They set out to build a line of forts to protect their country and keep the English out. These forts were merely blockhouses built chiefly of wood. They were not strong enough to withstand a heavy attack, but were meant to keep the English traders from entering French hunting grounds and also to prevent the western

Indian tribes from carrying their furs to the English merchants at Albany.

A fort was built on the Niagara River to show the English that the French meant to protect this road to the northwest. Then the English built a fort at Oswego to attract some of the Indian trade that would otherwise have gone down to Montreal. The French

From an old print

FORT NIAGARA, FROM THE BRITISH SIDE OF THE RIVER

also fortified their posts at Detroit and Mackinac to guard against any invasion of the upper lake country. They courted the friendship of the Miami Indians about La Salle's old fort on the St. Joseph so as to protect the portage at South Bend. This would keep an enemy from approaching their Illinois settlements by way of the Illinois River. Near the head of Green Bay, they had another stockade where a garrison was

kept to control the passage to the Mississippi by way of the Fox and the Wisconsin River portages.

Fort Chartres. The French also thought it best to guard the Mississippi from the English. Plans were therefore made to build posts at different points along that river. One of these posts was erected at the mouth of the Arkansas River and another in the

EARLY FRENCH OUTPOSTS

Illinois country. The place chosen for this latter fortress was on the east side of the Mississippi, a few miles above Kaskaskia. The fort was laid out by skilled engineers and was built at great expense and with much labor. Within its high walls were stone barracks, a magazine for storing powder, and two deep wells to furnish the soldiers with water. It was called Fort Chartres. The French also built forts to protect the Wabash waterway. They had one fort near where Lafayette now is and one at Vincennes.

Questions and Problems

1. Why had the French obtained the lion's share of America?
2. Why did the English court the friendship of the Iroquois?
3. What do you think of the French plans for holding their territory? Can you suggest a better plan?
4. Find on a map the location of the forts mentioned in this chapter and tell why they were so located.
5. How did these forts differ from modern forts?

Books to Read

Baldwin, J. — *The Conquest of the Old Northwest*, pp. 11–31; American Book Company.

Laut, A. C. — *Pathfinders of the West;* The Macmillan Company.

CHAPTER V

THE FRENCH AND ENGLISH ON THE OHIO RIVER

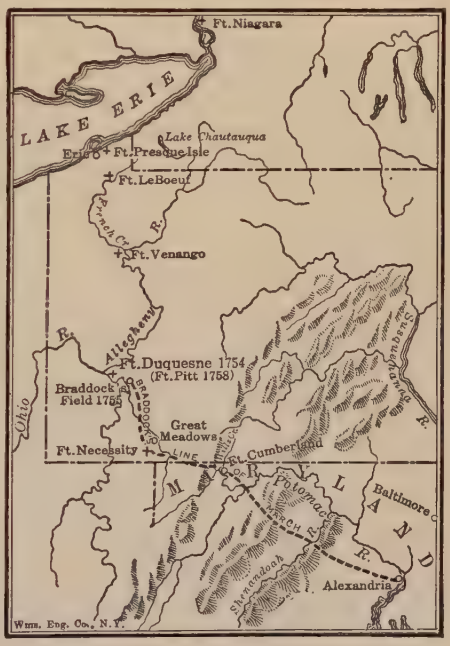
The Ohio River. You will see on the map that nearly all the streams which flow down the western slope of the Alleghenies find their way, sooner or later, into a single great river, the Ohio. This stream was then the only road through this fertile region. Yet the Ohio River was seldom visited and little known, for the French in those days used waterways farther to the west. For fifty years after its discovery, the Ohio was thought to be only a tributary to the Wabash, and yet the explorer or trapper who paddled all the way down it in his canoe found that it was a long journey. Not until he had floated for more than nine hundred miles between its wild, wooded shores did he arrive at its mouth.

Through all this Ohio Valley region the Iroquois held sway. They were so feared by the scattered tribes in the vicinity that this region was almost deserted by the red men and was left as a wilderness for hunting and trapping.

The English in the Ohio Valley. In spite of the French forts at Detroit, on the Wabash, and on the Mississippi, English traders from Albany kept growing bolder every day. Year after year, these daring

English agents continued to visit the countries northwest of the Ohio. In the fall of the year they came singly or by twos and threes to the Indian villages, carrying a stock of blankets and "firewater," which the red men were always eager to buy.

They succeeded so well that in the end a large share of the fur trade in the Ohio Valley came into their hands. Once a Frenchman met six Englishmen who had been trading in the northwest and were returning to Pennsylvania. They had with them fifty horses, each carrying three large bales of furs which they had bought from the Miamis and Shawnees.



FORTS ALONG THE OHIO RIVER

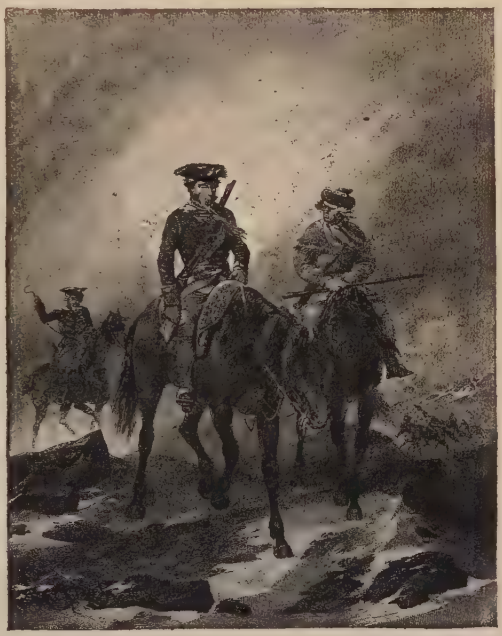
Fort Le Bœuf. The Governor of Canada now became fully alive to the danger of the English in the Ohio Valley. He sent a man named Marin to build forts at good places along the Ohio River. At Presque Isle, where now stands the city of Erie, Pennsylvania, Marin built a fort of chestnut logs in which he stored

a great quantity of supplies. Then to the south he cleared a broad road twenty-one miles through the forest. At the end of that road, on the banks of French Creek, he built a strong stockade which he called Fort Le Bœuf. This was the first fortified post on the headwaters of the Ohio. Canoes launched here in the creek might float down the Allegheny River and on to the Ohio and Mississippi rivers.

Venango. After Marin had built Fort Le Bœuf, he began to plan the next link in the chain of forts that he wished to build along the Ohio. Farther down in the forests, where French Creek enters the Allegheny, there was a cluster of Indian huts called Venango. Here a Virginia trader had built a trading post. Marin sent forward one of his captains with sixty men to seize Venango. It was easily taken and turned into a French fort. The fickle Indians, who had been so eager to welcome the English, now declared that they had always loved the French as brothers. There was hardly a tribe in all the wilds of the Ohio Valley that was not suddenly won over to the side of the French. Even the Iroquois hastened to offer their friendship.

The woods and swamps through which Marin's men had trudged bravely from Presque Isle to Venango were full of malaria. The French soldiers grew sick and many of them died. Marin, too, died bravely at his post in the wilderness. It was thought best at the approach of winter to send most of the men back to Montreal, and to put off further movements until the following spring.

St. Pierre and Washington. Then Governor Duquesne chose St. Pierre, a brave soldier, to be commander of the line of military posts. St. Pierre took up his headquarters at Fort Le Bœuf. One evening a few days after his arrival there, the sentinel at the gate shouted that strangers were approaching. He saw two horsemen coming from the south. One was a tall, noble-looking young man, and the other was an old backwoodsman clad in buckskin and armed with gun and knife. With them came a half dozen Indians and several white men with pack horses bearing their supplies. All made their way slowly through the deep slush and snow. They were admitted to the fort and kindly entertained.



From an old print

WASHINGTON ON HIS MISSION TO THE UPPER OHIO

The young stranger said he had business with the commander. He did not understand French and so had to use an interpreter. He introduced himself as

Major George Washington, Adjutant General of the Virginia militia. Young Washington handed St. Pierre a letter which he had brought from Robert Dinwiddie, who was then Governor of Virginia. The letter informed the French that they were trespassing on a region that belonged to the King of England, and it requested them to withdraw from the Ohio country and not to disturb peace between England and France.

St. Pierre's reply. St. Pierre delayed his answer for three days, but in the meantime he entertained

From an old print

MAJOR WASHINGTON ON HIS WAY TO THE FRENCH COMMANDER

Major Washington with much honor and hospitality. When the fourth day came he gave his reply. In the letter, which he handed to Washington, he informed

Governor Dinwiddie that he expected to hold the posts and that no threats of Englishmen or Virginians would make him withdraw from the territory which he was ordered to defend.

Major Washington took the letter and, bidding the French commander good-bye, started on his return journey. The weather had grown colder and the slush had frozen into ice. Snow was falling and strong northwest winds were whistling through the treetops, heaping up drifts in the valleys and among the fallen trees. It was by no means a pleasant morning to set out upon a journey of five hundred miles through a pathless wilderness. The horses gave out, so Washington and his one companion pushed on afoot through the wintry forests, across frozen streams, and over snowy mountains. They suffered much from the extreme cold and were in constant danger from lurking savages. After many narrow escapes they reached Virginia and Washington delivered his message to Governor Dinwiddie.

The forks of the Ohio. The place where the Allegheny and Monongahela rivers meet to form the Ohio was the key to the Ohio Valley. To the Englishmen in the eastern colonies, who might wish to go to the Ohio, there were only two routes in those days. One was from western New York down the Allegheny and the other one from Virginia up the Potomac River through difficult mountain passes to the headwaters of the Monongahela. The two routes met at the forks of the Ohio, where Pittsburgh now stands. Here

was the ideal place for a fort to control both roads. At this point the French soon built Fort Duquesne.

Questions and Problems

1. How do you explain the fact that the Ohio River was little known in pioneer days?
2. Locate on a map the new line of French forts mentioned in this chapter.
3. Why were so many forts needed by the French?
4. What was the purpose of Washington's visit to Fort Le Bœuf?
5. Locate Pittsburgh on a map and tell why you think a great city has been built at this location.
6. Can you think of any other cities similarly situated?

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CHAPTER VI

THE FRENCH AND INDIAN WAR

Washington's first battles. The year after Washington's visit to the French fort, the Governor of Virginia gathered a company of soldiers and put Washington in command of them to drive the French out of the forts on the Ohio. The French, however, had also mustered a large number of men, who defeated Washington's troops and drove them back.

The next year (1755) England sent over some redcoats to fight with the English colonists against the French. They landed near Chesapeake Bay, planning to march against the French at Fort Duquesne. General Braddock, who led these British soldiers, was a brave officer, but he knew nothing about fighting battles in the American woods, nor had he ever met the Indian in battle. Washington, with some men from Virginia, accompanied General Braddock. He told the English general that the French and Indians would hide in the forest and fire at his soldiers from behind trees. Braddock laughed at this warning and pushed forward on the forest trail. The British soldiers made a splendid showing with their bright red coats and their bayonets glistening in the sunlight as they moved through the wilderness.

Braddock's defeat. Everything went well with the British until they had come almost to the French fort, when suddenly a shower of bullets burst forth from the dense woods. The redcoats could not see who fired at them, and so did not know which way to turn or where to aim their guns. All the while the French and

From an old print

BRADDOCK'S RETREAT

Indians kept picking off the redcoats as they stood huddled together along the forest trail. In a little while the greater part of Braddock's fine army was shot down. General Braddock himself was badly wounded and died a few days later. Washington had four bullets fired through his coat, but escaped unhurt. The English soldiers who were not killed turned and

fled back toward Virginia. Had it not been for Washington and his men, who took to the woods and fought the Indians in their own fashion, probably the British would all have fallen. The French were full of glee and celebrated their victory with much rejoicing. They boasted that they would wipe the English name off the map of America and would call the whole country New France.

William Pitt. About this time, a great man in England named William Pitt was given the management of the war. Pitt sent over a new English army to capture the French forts. When the French heard of their coming, they gave up their fort at the forks of the Ohio and fled northward toward Canada. The English and their colonists took Fort Duquesne and renamed it Fort Pitt, in honor of William Pitt. Around Fort Pitt grew up the city of Pittsburgh.

Wolfe and Montcalm. William Pitt next sent a British army, under General Wolfe, to take Quebec, the capital of Canada. Now Quebec stands on a high and rocky bluff overlooking the St. Lawrence River. A small number of soldiers could hold this height against a large force of the enemy, and the French thought that the English could not capture it. The French commander at Quebec, General Montcalm, was on the lookout for the English. We are told that he slept with his clothes on for weeks so that he might always be ready to fight. Wolfe's army came up the St. Lawrence in ships. They tried for a long time to capture Quebec, but in vain. At last, Wolfe decided

From an old print

THE CITADEL OF QUEBEC

that the only way he could take the city was to climb from the river to the top of the heights and surprise the French.

His fleet of warships was then several miles above Quebec. One night his men embarked in boats and floated silently down the river. About three miles

From an old print

THE DEATH OF GENERAL WOLFE

above Quebec, they stopped and landed, making as little noise as possible. Then the redcoats, one by one, started slowly to climb the bluff by taking hold of the bushes and low branches of trees. It was difficult to climb the steep heights in the dark, but when the sun rose the British army was drawn up in a thin red

line upon the heights. General Montcalm could hardly believe his eyes.

Then the great battle began. The English struggled to push their way into the city and the French fought to keep them out. General Wolfe was shot. As he lay dying he heard some of his men shout "They run — they run!" "Who run?" asked the dying Wolfe. "The French," was the reply. Wolfe said: "I die in peace."

General Montcalm also received a mortal wound. He asked the surgeon who stood by how long he had to live. The surgeon replied: "Not many hours." "So much the better," said the brave Montcalm, "for I shall not live to see the surrender of Quebec." Not long after the death of these two brave generals, the French opened the gates of Quebec to the English. The redcoats marched in, ran up the British flag, and took possession of the capital of Canada (1759).

France defeated. The war between England and France went on for four years longer, but the French were at last completely overcome. When peace was made the King of France was forced to give to England all of Canada and their territory east of the Mississippi River. This was all the land that France then held, because before the great war was over the French king had secretly given to Spain New Orleans and all the French territory west of the Mississippi as far as the Rocky Mountains. And Spain, who long before had settled St. Augustine, now gave Florida to England. Thus Canada and all of what is now the United States east of the Mississippi River became English territory.

Pontiac's Conspiracy. When the Indians saw that the French were defeated and driven from America, they began to fear that the English would treat them in the same manner. While the French and English were at war, both those nations treated the red man with much respect. Both loaded him with presents and gave him plenty of brandy, hoping to secure his assistance. But now that the French were out of the way, the English had no further use for the red tribes.

From an old prin

CHIEF PONTIAC

The Indians saw their best hunting grounds invaded, for the smoke from many a white man's cabin arose from the dark green forests of the Alleghenies and the upper Ohio. Therefore Pontiac, a chief of the Ottawas, formed a great conspiracy among the Indians to drive the English out of the Ohio Valley. Even before France and England had made peace, Pontiac secretly visited the various western tribes, arranging plans for all to strike at once and crush the whites without warning.

The blow fell in 1763, when hundreds of pioneer families were slain and their huts and crops burned. Every western fort except Detroit and Fort Pitt fell into the savages' hands, while the settlers were scalped with the utmost cruelty. Then the English sent an army against the Indians and brought them to their

knees. A treaty was at last made with them at Ft. Stanwix (1768) in which the savages gave up to the English all of western Pennsylvania and western Virginia, and nearly all of Kentucky, for six thousand dollars in money and goods. Here was a large territory west of the Alleghenies thrown open to the English for settlement.

Questions and Problems

1. Why was Virginia more eager than the other colonies to control the Ohio Valley?
2. What do you think of Braddock as a general? Give reasons.
3. Locate on a map the territory gained by England in this war.
4. What is your opinion of Pontiac? Give reasons. What did the Indians think of him?

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CHAPTER VII

THE HUNTER–PIONEERS

Three types of pioneers. Different types of settlers made their way to the frontiers of this newly acquired land. First came the hunter or trapper, who traded with the Indians. In Kentucky and Tennessee the first comers from the east were not traders, but hunters. Such a man was Daniel Boone. When the land about the cabins of these hunter-pioneers became more thickly settled and the larger game became scarce, they moved farther into the wilderness, where game was more plentiful. The pioneer rifles quickly killed off the larger wild animals such as the deer, elk, and buffalo.

Close behind the hunter came the rugged hunter-settler, who pastured his stock in the woodlands; but he, too, lived largely by his rifle. He did some work with his simple tools, but his cabin was a squalid dwelling place with but few comforts. About the cabin were blackened stumps and dead trees killed by girdling, and a small field very badly tilled. When neighbors began to settle near by, he sold his claim because he felt cramped. Gathering his cattle, his tools, and his household goods, he set out toward the sunset to locate again in the unbroken forest.

Then came the permanent farmer-settler, who meant to hold the land, rear his children upon it, and spend his life there. Sometimes, of course, this type of settler, hearing of better chances farther on in the wilderness, moved on; but as a rule he was satisfied when he found good land. His rude cabin was in time replaced by a well-built house and barn.

The hunters lead the way. The hunter-pioneer, who led the way, plunged wildly into the depths of the forest, where he saw no domestic animals about him, only wild life. In the lonely night he heard the howl of the wolf, or the hooting of the owl, or the shriek of the frightened panther. Even the hunter's faithful dog chose to be quiet in the wilderness silence. And the day was as lonely as the night. Only the noise of the wild turkey, the cawing of the crow, or the tapping of the woodpecker on the hollow beech tree could be heard.

From an old print

DANIEL BOONE

As the hunter traveled toward the land of the beaver and the buffalo, over the hills and across the streams, under the great forest trees, he often had to wade through rank weeds and grass which covered the ground. From the top of a hill he might behold a winding creek whose banks he wished to explore. Sometimes in cloudy weather he lost his way and did not know which was north, south, east, or west. Then he looked for the thick moss which always grows on the north side of old trees. He knew when he was approaching a river by the trees which grow on the banks of streams — such as the ash, basswood, and maple, all hung with wild grape vines.

In an unknown region, surrounded by dangers, the hunter was forced to be on his guard. When the long, hard march of the day was ended, he sought some narrow, sheltered hollow. Here by the side of a large log he built his camp fire, and after his coarse and scanty meal wrapped himself in his blanket and stretched himself upon his bed of leaves, with his feet to the fire. By his side lay his faithful dog and, near at hand, his gun.

Getting food. Such a life soon made tatters of the lonely woodman's clothing. Hunger each day drove him farther on into the forest in search of food. Often he had to eat his venison, bear meat, or wild turkey without bread or salt. He did not know at what moment he might be stung by a serpent or at what turn he might meet a bear. In the evening, from some limb above his head the fearful panther might be ready to

drop upon him and tear him to pieces. While from his blind at night he was watching a deer lick to capture a wild animal for food, he might hear a growl and discover near by a panther playing the same game.

The pioneer rifle. The chief tools of the hunter-pioneer were the ax and the rifle. The pioneers could not shoot very rapidly with their old-fashioned muzzle-loading guns. The rifle was not like the rapid-firing shotguns and revolvers of to-day. It was single-barreled, fitted with a flint lock, and had to be loaded at the muzzle. To load a rifle, the marksman first

A FLINT-LOCK GUN

measured his charge of powder by pouring it out of a horn into a charger. He then poured the powder into the gun, after which he laid a piece of cotton cloth or a thin bit of buckskin on the muzzle. Upon this he placed a bullet, which he forced in as far as he could with the handle of his knife. The next move was to cut off the cloth, or buckskin, close to the bullet, with the edge of his knife. He then drew the ramrod from its groove underneath the barrel of the gun, and with it he rammed the bullet down to the bottom of the barrel tight upon the powder. Putting the ramrod back into its place, he primed the pan of the flintlock by filling it with powder. After shutting the pan he set

the double trigger, drew back the cock, and at last was ready to fire.

You can see how many things he had to do, and why he could not fire very rapidly. Still the pioneer rifle was a deadly weapon at close range. The Indians had great fear of it, for the pioneers were "dead shots" with those heavy, long-bore rifles. They could shoot very accurately for a distance of one hundred yards. Sometimes, however, the flint failed and the lock had to be snapped several times before the gun would fire. The pioneer kept his powder dry in a horn obtained from some animal, for if it got damp his gun was useless.

Blazing a path. The hunter-pioneer followed the road, or forest path, marked by what they called "blazes." These were simply ax-cuts on the sides of trees, where the bark was removed and the white spots could be seen easily for some distance. The traveler finding one of these white spots looked for another farther on and in this way made his way through the forests.

The pack saddle. The hunter carried his belongings on a pack saddle, which was a crude affair made from the forked branch, of a certain peculiar shape, of a tree. A branch suitable for a pack saddle was an object to prize. So great was its value that once a minister, preaching in the open air, cast his eyes on the treetops and interrupted his sermon by saying, "Yonder is one of the best forks for a saddle I have ever seen in the woods. After service we will get it." When fitted to a horse, the pack saddle carried all kinds of goods that could be transported on horseback.

Questions and Problems

1. What is the difference between a hunter-pioneer, a hunter-settler, and a farmer-settler?
2. Which would you rather be? Why?
3. What advantage had the pioneer rifle over the Indian bow and arrow?
4. What is meant by a "blazed trail"? Can you think of a better way to mark a forest trail?

Book to Read

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CHAPTER VIII

THROUGH CUMBERLAND GAP

Virginia blazes the way. As we have read, the New England colonists were shut out from westward migration for a long time by the rugged mountains which barred the way, so they were content with the fisheries and commerce that occupied them near the sea. The people of New York were prevented from moving westward, because the Iroquois tribes held the only natural gateway to the west, the Mohawk Valley. So it is to the colonists of Pennsylvania, Maryland, Virginia, and North Carolina that we shall look for the first movement westward, which led them over the Allegheny Mountains into the Ohio Valley.

The Virginians seemed to be most eager for land. Their first object was to make money out of western lands, and they also wished to extend the boundaries of Virginia. Explorers who had crossed the mountains brought back stories of great stretches of fertile territory. George Washington owned thousands of acres of western land. It is said that he died the richest man in America, and half his wealth lay west of the Alleghenies. It was not long before many Virginians were eager to migrate into the section now known as Kentucky. The French had been driven out of the Ohio

Valley, and the Indians had promised by treaty to stay out of western Virginia and eastern Kentucky. So the way was clear.

Thomas Walker, a Virginian, was early sent as the agent of a land company to locate a large grant of land in Kentucky. With several companions, he made the

From an old print

A SCENE ON THE WASHINGTON ESTATE, MOUNT VERNON

difficult journey, traveling for six months in the wilderness. They went through a pass of the Blue Ridge into the Great Valley, which they followed toward the southwest. Passing slowly over rough Indian trails, they saw much of the savages and of the wild animal life.

Cumberland Gap. The name of Powell, a companion of Walker, was given to one of the long streams that

flow southwest into the Tennessee River. Drifting down Powell's River, they saw on their right the rugged Cumberland Mountains. As they wished to explore the forests of Kentucky, they kept a sharp watch for a pass or gap through these mountains. By and by they came upon a deep notch a thousand feet lower than the mountain ridge. Turning westward into this rough and narrow pass, which they named Cumberland Gap, they climbed up about five hundred feet, then toiled through a wooded ravine, and came at length into what is now eastern Kentucky.

Walker did not continue his journey far enough to find the beautiful blue grass regions of Kentucky, nor the rich bottoms along the Ohio River. After wandering about in the rough forests of eastern Kentucky for a time, he returned to his home. He had done good service for his land company, besides discovering a great pass which led westward through the mountains.

In the wilderness. Walker wrote down the story of his journey. He says, "We killed on the journey thirteen buffaloes, eight elks, fifty-three bears, twenty deer, four wild geese, and about one hundred and fifty turkeys, besides small game. We might have killed three times as much meat if we had wanted to." At one time, however, Walker's party ran short of food. They were compelled to kill and eat one of their dogs.

Dogs were of great aid to explorers and emigrants. Catching game without them was almost impossible. When the horses strayed in the woods, the dogs aided in tracing them. They also gave warning of the

approach of strangers. One night Walker's dogs were uneasy, and the next day tracks of Indians were discovered near by. The dogs once caught a large bear, but before the men could come up to shoot the wild beast he had wounded one of the dogs so that it could not travel and had to be carried on horseback until it recovered.

Daniel Boone. The man who blazed the trail through Cumberland Gap and led hundreds of pioneers

DANIEL BOONE'S CABIN IN MISSOURI

into the western wilderness was Daniel Boone. Boone was born in Pennsylvania on what was then the edge of the wilderness. From his boyhood he knew all about the Indians. Boone had some training as a blacksmith, so that he was able to mend his own traps and

guns. In early boyhood he spent most of the winter hunting, and thus helped to feed the family. The skins which he captured he took to Philadelphia, where he traded them for powder, lead, and hunting knives.

When Daniel was about sixteen years old, his family moved down the Great Valley, crossed the Potomac, and passed on through the valley of Virginia to the southwest. Then they turned eastward, crossed the Blue Ridge, and made their home in the valley of the Yadkin River in North Carolina.

At his home on the Yadkin, Boone spent his time in farming, blacksmithing, and hunting. He was happiest when wandering in the woods with his gun. He often took long hunting trips far from home, and returned with bear's meat, venison, and furs.

Boone in Kentucky. In 1769, Boone and a friend named Finley set out for Kentucky, crossed the Blue Ridge Mountains, and passed through Cumberland Gap. They were surprised one day by the Indians, their tent was plundered, and their furs stolen. But Boone knew no fear. Afterwards he made several trips to Kentucky, and as he liked the country, he finally took his family with him and moved there. Thus he was the leader of the hunter-pioneers and settlers in Kentucky.

The party under Boone founded a town named Boonesboro, where they built a fort (1775). As agent for a land company, Boone now engaged in surveying tracts of land for people who came to settle. Acres of

forests were soon cut down and crops began to appear here and there about the fort and town.

The Wilderness Road. It was Boone who marked out much of the trail afterward called the Wilderness Road, but it had other names, such as Boone's Trail and Kentucky Road. The Wilderness Road was a long one. The trail started at Lancaster, Pennsylvania, and passed between the Allegheny and Blue Ridge ranges to the Potomac River near Harpers Ferry. From here it followed the Shenandoah Valley, by Mar-

THE CUMBERLAND, OR NATIONAL, ROAD

tinsburg, Winchester, and Staunton. Then it led to the headwaters of the New River, where it was joined by another pioneer road from Richmond through central Virginia. Here, close by the meeting of these two trails, Fort Chissel was built. As we have said, Boone blazed the way through Cumberland Gap, and the road was finally marked out as far as the falls of the Ohio, where Louisville now stands.

People began to pass through Cumberland Gap in large numbers until there were many clearings and numerous towns scattered about in the wilderness.

And as the white men appeared, the Indians skulked farther back in the forests.

A difficult journey. The emigrants who left Virginia for Boonesboro had a hard journey. Before starting, each man laid in a store of supplies for himself and his horse, say thirty pounds of flour, half a bushel of cornmeal, and three bushels of oats. He usually slept in the open. Each night the horses, though hobbled, strayed away in the forests, and it was necessary to hunt for them before the next day's journey. On account of the Indians, it was unsafe to travel alone over the Wilderness Road. Those who journeyed this road usually traveled in companies and went well armed. When a party was about to start, they often advertised the fact in the papers, as follows:

> NOTICE. — A large company will meet at Crab's Orchard on the 19th of November in order to start the next day through the wilderness. It is very dangerous on account of the Indians, and it is hoped each person will go well armed.

On the march. As early as 1788, parties left Virginia about every ten days throughout the summer and fall. They were sometimes so numerous that it was difficult to find camping places where there was enough feed for their stock. Families from the same neighborhood often made the journey together. Men, women, and children, with horses, cattle, and other domestic animals, were seen moving onward along the lonely forest path. The men usually went on foot with

guns on their shoulders, driving the stock and leading the pack horses. Some of the women walked, carrying various things, sometimes balancing pails on their heads. Other women rode horseback with children in their laps. As the families were large, small children were frequently swung in baskets across the horse and each horse was led by being tied to the tail of another pack animal walking in front of it.

One pioneer writes, "We overtook Colonel Henderson and his party bound for 'Kaintuck,' and there we camped for the night. They were broiling and eating meat without bread. We crossed the creek many times. It has very bad banks. Abram's saddle turned and the load all fell in. We went out this evening and killed two deer."

Bound for Tennessee. In 1779, after Boone had formed a settlement in Kentucky, James Robertson, who lived in North Carolina, wished to migrate into the country which is now Tennessee and make a settlement there. He was a young man, not yet thirty, but he formed a company of three hundred and eighty people who dared to face the dangers and hardships of the wilderness. The women and children, a hundred and thirty in number, set out on the Tennessee River in boats and dugouts and canoes, in charge of a few men. It was midwinter. For three months they paddled upon strange and unknown waters. They were pursued by the Cherokee Indians and ran the rapids for thirty miles while under fire from the red men. One of the pioneers was drowned, one died from disease, several were killed

by arrows and tomahawks, and out of the whole number only ninety-seven reached their destination.

Nashville settled. The men of the party traveled overland, following Indian trails for five hundred miles. They met the party of women at the place where Nashville now stands. Immediately these brave people set out to conquer the wilderness. They built cabins and planted corn amid the stumps of the clearings. In one hunt the men brought home one hundred and fifty bears, seventy-five buffaloes, and ninety deer. But in two years there were only seventy people left in the settlement. The others had all been slain by the Indians.

They took a vote as to whether they should stay and fight it out or give up and return. Powder and lead were scarce and in order to raise corn the rifle was as necessary as the plow. But not one man voted to give up the fight. Ten years later only fifteen persons of the original number who began this migration were left, and we are told that but one death in the settlement was due to natural causes. One man, after being shot and stabbed many times, was scalped alive, yet he lived to jest about it. Such was the stern character of the first settlers in Tennessee.

Questions and Problems

1. What first led the Virginians into the western wilderness?
2. Would you have liked to go to Kentucky with Thomas Walker? Why or why not?

3. Locate Cumberland Gap on your map. Why was it important?

4. Do you think Daniel Boone did anything important enough for us to remember? What did he do, and why is it remembered?

5. Which do you think had a harder time, the settlers at Plymouth or those with Robertson in Tennessee? Give reasons for your answer.

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CHAPTER IX

THE PENNSYLVANIA ROAD AND THE OHIO RIVER

Settlements on the Upper Ohio. No sooner were Pontiac and his Indian tribes out of the way than pioneers on the western borders of Pennsylvania and West Virginia turned their faces toward the Ohio River route to the west. Among the first to cross the mountains were the Scotch-Irish. The town of Pittsburgh was laid out in 1765. In five years it was a village of twenty houses, and 1500 whites were scattered along the banks of the upper Ohio. The first clearing was made at Wheeling by Ebenezer Zane (1769).

Battle of Point Pleasant. The territory north and west of the Ohio River, which is now the state of Ohio, was still Indian country and unsafe for the whites, so all settlements were made to the south. The Indians even resented the presence of white families on the south banks of the river, and in 1774 they gathered under Chief Cornstalk of the Shawnees to drive the palefaces back across the mountains. The settlers mustered under Andrew Lewis and met Cornstalk and his red warriors at Point Pleasant near the mouth of the Great Kanawha River. It was a stubborn, hard-fought battle, but the Indians were badly beaten and driven back north of the Ohio. They then made a

treaty and agreed not to hunt south of the river or to molest the boats of the whites. Thus the Ohio River route was made somewhat safer.

Forbes' and Braddock's roads. There were two ways to reach Pittsburgh from the east; one was named Forbes' Road and the other Braddock's Road. Each route was very difficult and full of danger. Forbes' Road was later known as the Pennsylvania Road. Travelers called it the northern route. It ran from Philadelphia westward over the mountains to Pittsburgh. Along it a line of forts and blockhouses was built. It wound through the beautiful hills of western Pennsylvania and crossed the Allegheny Mountains through steep and narrow passes.

Braddock's Road, later known as the Virginia Road, was the main route from Virginia and Maryland to Pittsburgh. It passed through Fort Cumberland. Travel between Fort Cumberland and Pittsburgh was very difficult. In winter the Virginia Road was almost impassable because it was clogged with snow. At other times the mud was deep and the rivers swollen. Cattle and goods were sometimes sent over this route as far as Brownsville and forwarded from there to Pittsburgh by water.

In revolutionary days Forbes' and Braddock's roads became important passageways to and from the western forts. Later they were in constant use during the summer months by thousands of emigrants to the western country. There were long trains of wagons which brought the produce of farms on the banks of

the Ohio to the markets of Philadelphia and Baltimore. Forbes' Road was also used by New England emigrants who were passing to the Ohio Valley.

Maurice Birkbeck, who founded an English settlement in Illinois, journeyed from Washington to Pittsburgh in 1817. He said: "All America seems to be breaking up and moving westward. We are seldom out of sight of family groups as we travel on this grand track toward the Ohio. Twelve thousand wagons passed from Baltimore and Philadelphia to Pittsburgh last year, each carrying from four to six persons and a ton or two of freight." The freight charge from Philadelphia to Pittsburgh was seven dollars a hundred pounds. There were numerous stages loaded to the utmost with passengers. There were also great numbers of travelers on horseback, on foot, and in light wagons.

Frontier roads. The frontier roads were very different from those which our automobiles traverse to-day. There were many logs and stumps in the roadway and the teams were guided partly by reins and partly by the shouts of the drivers. These roads had originally been Indian trails. For many years, no one knows how long, the red men had followed these winding footpaths and had beaten them hard and deep into the forest soil. At first the white men widened them for pack horses. Later, when wider wagon roads were needed, the trees on either side were cut away and the stones removed.

Carrying goods by pack horses had become an important business and, when wagons appeared and began

to take away the trade, the owners of the pack horses were very angry. Strange to say, it did not occur to them that they could buy harnesses and wagons and use their horses to make money in the new way. Instead of trying to keep up with the times, they made

From an old print

COVERED WAGONS WERE USED FOR LONG-DISTANCE TRAVEL IN PIONEER DAYS BEFORE RAILROADS WERE BUILT

every effort to interfere with the wagon trade. Sometimes they gave vent to their spite by upsetting the stagecoaches and injuring the passengers.

The stage drivers were a rough, boisterous class of men, but they were steady and cool-headed. They were loyal to one another, but unmindful of the rights of others. Sometimes when they met a fine gentle-

man traveling in a carriage on the road, they delighted in taking off a wheel or crushing his light carriage in a collision.

Strong wagons were needed for travel on frontier roads. The wheels of many of these wagons were solid and were made by sawing thin slices across the butt of a large tree. In rainy seasons the wagons often got stuck in the mud and the driver had to wait for other teams to come up and help drag him on to hard ground again.

The wheels of a few emigrant wagons were provided with lock chains to serve as a brake, but most of the wagons were held back in going downhill by a large log or broken tree-top tied with a rope to the back of the wagon and dragged along the ground. In some places the roads sloped to such an extent that all the men in the wagon had to pull at the side stays or at short ropes tied to the upper side of the wagon to prevent it from upsetting. Every few miles the wagons met a line of pack horses headed eastward with heavy loads of peltry and ginseng, which were the chief articles brought from the regions west of the mountains. Many of the wagons carried kegs of spirits, salt, and bales of drygoods to the merchants in Pittsburgh.

Pittsburgh. Pittsburgh was the chief starting point for the journey down the Ohio River. There grew up an active boat-building industry here to supply the hundreds of emigrants who arrived every week from the east. For seven months of the year the streets of Pittsburgh were crowded with emigrants arriving and

departing, and its water front was lined with boats of every description. As none of these boats ever came back, the business of boat building never flagged. Besides bark canoes and dugouts, the most common vessels were the keel boat and the flat-bottomed scow with square ends.

Down the Ohio. The emigrants tied several logs together and made rafts on which they placed their

PIONEER FAMILIES USED FLATBOATS FOR TRANSPORTING GOODS AND MOVING TO NEW SECTIONS

families, live stock, and tools, and pushed out into the current. Sometimes several of these rafts were hitched together. Other emigrants built a keel boat or an ark and loaded it with provisions for the long journey. When the river was high the boats moved safely and there was nothing to fear except the treacherous Indians along the shore. When the river was low there was danger to the most skillful boatman. The Virginia backwoodsman had had no experience in navi-

gating such a dangerous stream as the Ohio with its changing currents and eddies and many sunken trees. Most of the boatmen dared not proceed at night for fear of a wreck.

Three hands were necessary to man the keel boats, one to pilot and two to row. Sometimes the boat had side-wheels which were kept in motion by horses walking in a tread mill. One of these boats was large enough to hold eighteen persons, their household furniture, and a stock of provisions that would last them a year; also their horses, cattle, hogs, fowls, and farming tools.

These boats stopped along the Ohio, or were pushed by poles up some of the small rivers to a point where the owner wished to settle. Here he sometimes took his boat to pieces and used the lumber to build houses, or sometimes sold it to a man who was going farther on. Many of these boats floated as far as the Mississippi and were pushed by poles up to St. Louis.

In the early days it was difficult to secure boats. It took a long time to build them, and it cost a great deal of money to buy them. For this reason the Virginians, in their earlier journeys westward, preferred the land route, which led through Cumberland Gap. But later on the pioneers found it easier to drift downstream in a scow than to toil overland. Traveling by water made it less difficult for the transportation of their goods and cattle, and such heavy articles as wagons and lumber for building a house might be carried in this way. Anyone making the return trip

generally took the land route because it was difficult to push boats up the river.

Settling the Kentucky side. In the year 1787, we are told, boats to the number of one hundred and forty-six, carrying three thousand people and thirteen hundred horses, besides many wagons, cattle, sheep, and hogs, passed by Fort Harmer down the Ohio River. The number increased each year. So rapidly had settlers pushed into Kentucky that there were thirty thousand people in that state by the year 1785. The leading towns were Louisville, Lexington, and Boonesboro, each with its stores and horse grist-mills. Log cabins and clearings were scattered through large sections of the densely wooded country. North of the Ohio there were no white settlers except about Detroit, Vincennes, and Kaskaskia.

Questions and Problems

1. Locate Point Pleasant on a map.
2. Do you think the battle of Point Pleasant was of much consequence? Why or why not?
3. Why were there not many roads from the east leading to Pittsburgh?
4. Do you think the people of those days enjoyed the trip to Pittsburgh? Give reasons for your answer.
5. Which would you have liked better, the overland trip to the frontier or the voyage down the Ohio River to the frontier? Why?

Book to Read

Sparks, E. E. — *The Expansion of the American People*, pp. 135–148; Scott, Foresman Company.

CHAPTER X

LIFE OF THE KENTUCKY AND TENNESSEE HUNTERS

Tomahawk right. We have said that the early Kentucky settlers came on horseback over the mountain trails, with their belongings on pack saddles, so they had but little in the way of baggage or furniture. They faced the hardships of the wilderness chiefly to get cheap land. In those days to get possession of land it was only necessary to settle on it — build a cabin and raise a crop. Some pioneers went into the forests and searched until they found a spring. Then with a tomahawk or an ax they marked their initials on near-by trees, and thus laid claim to the land.

There were many things to consider in choosing a site for a cabin. The pioneer home must be near an abundant water supply, but it should not be located in a swampy region because that would undermine the health of the family. Near a creek or spring of running water, the settler sought out a hill or knoll where he built his cabin. Springs were more numerous at that time than they are to-day. Each autumn, year after year, the great forests covered the ground with thick leafy carpets, which absorbed the rain as it fell, and fed it out later in numerous springs. Some of these springs continued to flow throughout the summer.

The boundary line. Perhaps you would like to know how neighboring pioneers marked off their boundary lines without quarreling. The pioneers usually settled on the lowlands. Their farms then extended to the ridges of the surrounding hills. The top of the hill was the line between the farms. This was a good arrangement because everything could be brought downhill to the house. No sooner were the woods cleared away and the weeds taken out than white clover and different kinds of grass were sown; these soon covered the ground and furnished pasture for the cattle.

The half-faced camp. The settler first built a rough shelter, called a half-faced camp, wherein his family lived, while he cleared the ground and planted and raised his first crop of Indian corn. The half-faced camp was made in this way: Two large, strong forks of wood were fixed in the ground at such a distance from a fallen tree as to make a pen about twelve feet square. A pole was placed from fork to fork and other poles from each fork to the log. Over these supports were piled a layer of brush to serve as a roof. Two sides were filled with logs which were rolled into place. The fourth side, which usually faced the south, was left open and in cold weather a great fire was made here. The family slept with their feet toward the fire and their heads toward the fallen tree. Sometimes skins were hung at this opening to keep out the rain and cold winds. Often the sides of the hut were covered on the outside or lined on the inside with skins of animals.

This shack was barely more than a sheep pen, to be sure, but it served the settler's family until he had time to build a better home. Abraham Lincoln's home in Spencer County, Indiana, was one of these half-faced camps. The settler did not build a better cabin at first because he needed the time to raise crops

BUILDING A HALF-FACED CAMP

to provide food for his family. After a while, when his clearing had been extended and he had cows, chickens, and horses, and a supply of grain and feed, he could turn his attention to building a more comfortable house.

A meat diet. Some of the early settlers came across the mountains in the spring, leaving their families at home, and returned for them the following autumn,

after raising a crop of corn. When the entire family came at first, the corn meal which they brought with them seldom lasted until more could be raised, so they had to live for a time without bread. The children were taught to call cooked venison and the breast of wild turkey "bread," while the flesh of the bear was regarded as meat. After living for many weeks on a meat diet, many of the settlers became ill. How eagerly they watched the growing vegetables which would give them something to take the place of their meat bread!

Other food. Every family had a small garden, where they raised a few vegetables. Besides the garden, they cultivated a "truck patch" covering from one half to one acre of ground in which they raised large quantities of corn for roasting ears, pumpkins, squashes, and potatoes. When these vegetables were ripe they were cooked with pork, venison, or bear meat. One dish, a great favorite, was made of pork and corn and was called "hog and hominy."

The children had a regular jubilee when the time came to pull young corn for roasting ears. There was still more joy when the grains of corn became hard enough to pound into meal, and johnny-cake was made. Corn bread, with an abundance of meat, made a good diet for these people who lived so much out-of-doors.

Whatever food was left from dinner was eaten for supper with milk. When there was nothing else, mush and milk made the regular supper; and if milk was scarce, mush alone was eaten. Johnny-cake and

corn pone were used for breakfast and dinner. Mush was sometimes eaten with sweetened water, molasses, bear's oil, or the gravy of fried meats. When there was a logrolling, a house-raising, or a harvest day, the usual dish was meat with dumplings, which was called a pot-pie and was a great treat.

Tableware. For many years after the settlement of Kentucky and Tennessee the people had for tableware only a few pewter plates and spoons, and wooden bowls, trenchers, and noggins. When wooden dishes were scarce, they used gourds and hard-shell squashes. A few families brought knives and forks over the mountains along with iron kettles.

Many pioneer children had never seen a teacup or saucer nor had they ever tasted coffee. After a time Delftware came into the homes, but many of the backwoods people disliked it because it was so easily broken and because the plates dulled the hunting knives which they used in cutting meat. Teaware was thought to be small for men, but it might do for women and children. People said tea and coffee were "only slops and did not stick to the ribs." A hearty backwoodsman thought it beneath him to show a fondness for these.

How the men dressed. The dress of the men on the frontier was partly like that of the Indian and partly like that of civilized man. Each man wore a hunting shirt, which was a kind of loose frock reaching halfway down the thighs. It had large sleeves and was open in front. The bosom of the shirt overlapped and when belted down it served as a huge pocket. It

would hold a chunk of bread, cakes, jerked meat, tow for wiping the barrels of his rifle, and other necessaries for the hunter or warrior. The hunting shirt was generally made of linsey, a mixture of linen and wool, but it was sometimes made of coarse linen and sometimes of dressed deerskin. Hunting shirts made of the latter were very cold and uncomfortable in wet weather. The belt, which was always tied from the back, answered several purposes. The front part, in cold weather, was used to carry the mittens and sometimes the bullet bag. From the right side of this belt hung the tomahawk, and to the left was fastened the scalping knife in its leathern sheath. A large cape, fringed with a ravelled piece of cloth of a different color from the hunting shirt itself, was worn over the shoulders. A pair of breeches, leggins, and moccasins completed the backwoodsman's costume.

Moccasins. Moccasins were made of dressed deerskin, usually of a single piece. Each had a gathering seam along the top of the foot and another from the bottom of the heel up as high as the ankle joints or a little higher. Flaps were left on either side to reach some distance up the leg. These were nicely fitted to the ankles and lower part of the legs by thongs of deerskin, so that no dust, gravel, or snow could get in.

A CHILD'S MOCCASINS

Moccasins could be made within a few hours, and

the process of making them was a simple one. A moccasin awl, which was made from the back spring of an old clasp knife, and a roll of buckskin for mending were tied to every shot-pouch strap. Almost every evening the hunter had to mend his moccasins. In cold weather, they were well stuffed with deer's hair or dry leaves, so as to keep the feet warm. But in wet weather, one might almost as well go barefooted as to wear soaked moccasins.

How the women dressed. Women in these early times wore linsey petticoats and bedgowns which were

THE FAMILY GOING TO CHURCH

This picture shows how the people dressed in pioneer days.

one-piece dresses. Over the head appeared a home-made handkerchief. They usually went barefooted in

warm weather, and wore moccasins or shoepacks in cold weather. The coats and other clothing of the women, as well as the hunting shirts of the men, were hung on wooden pegs on the walls of the cabin. In this way a stranger could always judge from the clothing he saw hanging up whether the family was poor or well-to-do.

The fort. A fort was built in every settlement to defend the people from the Indians. At the corners of the fort were the blockhouses. The blockhouse walls had portholes at regular intervals and at the proper height, and the outside was made bullet proof. The entire fort was built without a single nail or spike of iron, for these were not to be had.

Getting ready for an Indian attack. The families of each settlement usually dwelt in their own cabins. But in the spring upon the first alarm of the approach of Indians they moved into the blockhouse belonging to their settlement. Sometimes a family was waked in the dead of night by a messenger with a report that the Indians were at hand. This messenger had come softly to the door or back window of the cabin and by tapping gently had awakened the head of the house. As the pioneers were very watchful, they awoke upon the slightest alarm.

The whole family was soon in motion. The father seized his gun and other arms, the mother dressed the children and gathered together the supplies to be carried to the fort, which was often a half mile or more away. The fire was not stirred, not even a candle was lighted. The younger children, who were apt to cry,

were taken up with great care. To quiet the older children it was only necessary to say, "Indians," and in frightened silence they would help collect clothing and provisions.

By morning a number of families were at the fort. During the next few days the men made quick journeys back and forth to the homes to get pieces of furniture and other articles needed.

Scarcity of important articles. The pioneers in this far western country had much difficulty in getting such articles as salt, iron, steel, and castings. They had at first no stores of any kind, nor did they have money to buy these things had they been for sale. Furs were all they had to give in exchange for provisions. In time they raised horses and cattle which they drove over the mountains to the Atlantic States to exchange for the supplies they needed.

A journey back east. Every family gathered what furs they could throughout the year. Even the children had their traps. In the fall, after the crops were harvested, a group of men from a neighborhood formed a little caravan to take the peltry east across the mountains. This caravan included horses well fitted out with pack saddles. Behind each saddle was fastened a pair of hobbles, made of hickory withes, and a bell. Besides the furs, the pack saddles held bags well filled with feed for the horses. These were to be brought back filled with salt. On the journey eastward a part of the feed was left at convenient stages, so that the horses might have something to eat on

their return. The horses also carried large wallets full of bread, jerked meat, boiled ham, and cheese for the drivers. At night after the horses were fed they were put out to pasture or turned out into the woods, well hobbled, with the bells open.

Furs or cattle for salt. These early caravans made their exchange for salt at first in Baltimore, and later in Frederick, Hagerstown, or Fort Cumberland. Each horse carried back two bushels of salt, weighing eighty-four pounds to the bushel. This was not a heavy load for the horse, but it was enough when we remember how little they had to eat on the journey. The common price of a bushel of salt was a cow and a calf. Furs were also given in exchange for salt.

The wedding party. When people gathered in groups in the pioneer days it was usually to aid one another in reaping, or in logrolling, or in the building of a cabin, or to plan an expedition against the Indians. The wedding was almost the only occasion upon which the pioneers gathered for real recreation, so the whole neighborhood looked forward to a wedding with much pleasure.

On the morning of the wedding day the groom and some of his friends gathered at the house of his father. They planned to arrive at the home of the bride about noon, which was the usual time for the wedding to take place. The ceremony came just before dinner.

The men were dressed for this holiday occasion in shoepacks, moccasins, leather breeches, leggins, and linsey hunting shirts — all homemade. The women

were clothed in linsey petticoats, linen gowns, coarse shoes, stockings, and buckskin gloves. Sometimes they had buckles, rings, buttons, or ruffles, which had been given them in the early days beyond the mountains, to add to their plain garb.

You can imagine how this wedding party looked as it passed along the Indian trail on horseback to the bride's home. Some of the riders had saddles, some bridles or halters, and some only a blanket which was kept in place by a rope or piece of leather tied about the horse. They marched along, sometimes in double file and sometimes in single file, as the horse paths were narrow. Sometimes the party came upon a grapevine tied across the path by mischievous boys who discharged their guns and covered the wedding party with smoke. This frightened the horses and often some of the less able riders were thrown to the ground.

The run for the prize. Before the party reached the home of the bride, two young men on horseback were chosen to race for a prize which was given away at the bride's door. The worst path that could be found was chosen to test their horsemanship. The signal to start was an Indian yell. The rival ponies dashed along over logs, brush, and muddy hollows, each striving to reach the bride's home first. When the winner returned with the prize the party greeted him with a wild whoop.

The wedding feast. The wedding ceremony was quickly over, and the guests sat down to a backwoods feast of beef, pork, fowl, venison, and bear meat, with

plenty of potatoes, cabbage, and other vegetables. During the dinner there was great joy and mirth. The table was usually a large slab of timber hewn out with a broad ax and supported with four sticks set in auger holes. There were pewter and wooden dishes. There were a few pewter spoons, battered about the edges, but most of the spoons were made of horn. The men used hunting knives at the table. After dinner, dancing began and generally lasted until the next morning.

On one occasion when the neighborhood had assembled for a wedding, the men armed as usual, a report came that the Indians had attacked a wagon five miles up the trail. The ceremony was postponed for the time being, and the men seized their rifles, mounted their horses, and galloped off to the rescue. The people were in constant danger from the Indians.

The pioneer school. Log schoolhouses sprang up everywhere along with log meetinghouses. The same building was sometimes used for both purposes. Boys and girls of all ages were taught together, and had to learn their lessons "by heart." At recess they played tag and pawns. The teacher often had to use the rod to quiet the older boys. He kept plenty of hickory switches in a convenient place. Just before school closed each day the whole school, big and little, stood up and held a "spelling bee." The only books used by these early schoolmasters were a primer, a Testament, a spelling book, and occasionally a small arithmetic.

When the boys felt particularly mischievous, they

took possession of the schoolhouse and held it against the teacher. This they called "barring out the master." Sometimes before the Christmas holidays they kept him out until he promised to treat them. If barring out failed to bring a promise to treat, the large pupils seized

AN OLD LOG SCHOOLHOUSE

the master and took him to a near-by creek and threatened to duck him. And if he still refused, he was thrown into the ice-cold water.

A barbecue. When the life of the settlers became less severe and there was more time for pleasure, they sometimes attended a great barbecue, to which they came from far and near on horseback. Many of the men brought their wives or sweethearts behind them

on pillions. On such occasions an ox or sheep, a bear, an elk, or a deer, was split in two and roasted over the hot coals. Dinner was eaten under the trees, after which there were various kinds of sport, such as horse-racing and dancing.

The backwoods store. Daniel Boone, at one time, kept a store and a tavern. We read that he charged one of his guests four pounds, sixteen shillings for two months' board and two pounds, four shillings for liquor. It was the usual thing, among frontier men, to drink liquor. In Boone's store were such articles as linen cloth, flannel, corduroy, chintz, calico, broadcloth, and velvet at various prices. He also had tea-ware, knives and forks, scissors, buttons, nails, and different kinds of hardware. The pioneers paid for these articles with furs and skins. A beaver skin was valued at eighteen shillings, a bear skin at ten shillings, while those of deer, wolves, coons, wildcats, and foxes were worth from two to four shillings apiece. Boone obtained the supplies for his store at Hagerstown and Williamsport, Maryland. He and his sons led thither their own pack trains laden with peltry and ginseng, and drove many horses to bring back the supplies that he needed for the store.

Questions and Problems

1. Would you like to live in a half-faced camp? Would you prefer an Indian wigwam?

2. Compare the food of a pioneer with that which we have to-day on our camping trips.

3. What were the advantages and disadvantages of the tableware used in the early days?

4. What were the advantages and disadvantages of the clothing worn at that time?

5. Compare your school with the pioneer school.

6. Write three other questions based on this chapter to be answered in class.

Books to Read

McMurry, C. A. — *Pioneers of the Mississippi Valley*, pp. 170–184; The Macmillan Company.

Roosevelt, T. — *Stories of the Great West*, pp. 15–55; The Century Company.

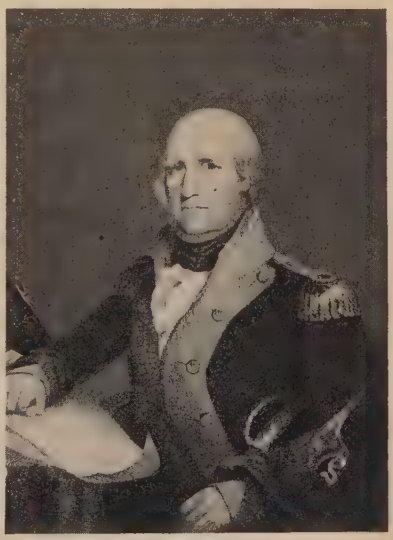
CHAPTER XI

WINNING THE NORTHWEST

The "Hair-Buyer General". At the time when the colonies were fighting for their independence from England in the Revolutionary War, English garrisons held forts at Detroit, Vincennes, and Kaskaskia. Over this entire western region, Governor Hamilton had command, with his headquarters at Detroit. He had orders from King George of England to hold this western wilderness against the Americans. Hamilton was called by the Americans the "Hair-Buyer General," because he encouraged the Indians to scalp the American settlers west of the mountains and paid the Indians for every white scalp they brought in. Hamilton planned, with the aid of these savage butchers, to drive the American backwoodsmen eastward over the Allegheny Mountains.

The Indians were furnished powder and lead to make raids upon the American settlers, and were paid in British gold to massacre men, women, and children, wherever they could find them. They made many raids south of the Ohio River to carry on their bloody work. Many a Kentucky pioneer on returning home after a day's work found his log cabin in ashes, his children dead, and his wife carried away by the red-handed savages.

George Rogers Clark. Among the early Kentucky settlers was a sturdy fighter against the Indians named George Rogers Clark. He was made colonel of the troops which were to protect these western settlements. Clark resolved to punish the Indians and to teach Hamilton a lesson for urging on these heartless red men. He planned to capture Kaskaskia, Vincennes, and Detroit, put the wicked Hamilton in irons, and drive the redcoats back into Canada. Having no army nor guns, and no ammunition, Clark went to the Governor of Virginia, Patrick Henry, and laid his plans before him. Governor Henry was pleased with Clark's scheme and furnished him with guns and ammunition, as well as with boats to carry his arms from Pittsburgh down the Ohio. Clark was also given power to raise seven companies of fifty men each among the frontier settlements. He was furnished six thousand dollars in paper money with which to pay his soldiers, and the right to promise each one of them three hundred acres of land if they drove the redcoats out.



GEORGE ROGERS CLARKE

After much trouble, Clark gathered a little body of

two hundred men. When ready to set out on their expedition they were not in uniform, but were armed with long heavy flintlock rifles and carried hatchets and long knives in their belts. At one side hung a powder horn, and at the other a game bag. On their heads they wore a squirrel or fox-skin cap, with a tail dangling from it.

Clark knew if he were to succeed in his undertaking with a small number of men, he must take the British by surprise. Fearing his plans might be reported to Hamilton, he kept them a profound secret. They embarked at Pittsburgh and floated down the Ohio to the rapids where Louisville now stands. Here Clark told his soldiers that he was going to lead them against the redcoats at Kaskaskia. Some of the men objected and deserted, leaving their leader with only a small band to undertake this hard task.

Fighting against odds. The British were protected by strong forts, and thousands of Indians and many Frenchmen who lived in the town were aiding them. Against such numerous enemies, Clark was marching with but one hundred and fifty-three men and no cannon. He left a few men at the falls of the Ohio River to protect his supplies and raise a crop. With the others he paddled down the Ohio to the mouth of the Tennessee, where he met a party of hunters from Kaskaskia. He made friends with them at once and found out many things he wished to know. They told him the fort at Kaskaskia was powerful and the soldiers well drilled; and that the commander was on the look-

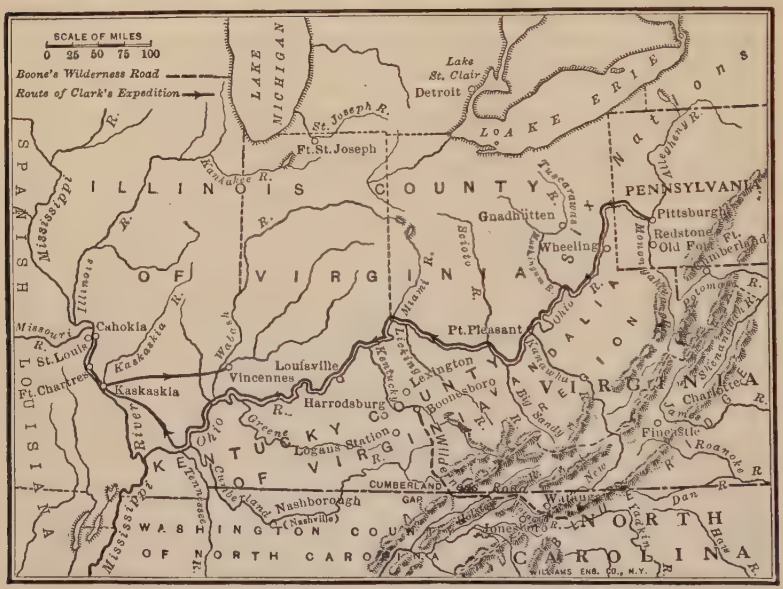
out for enemies who might be coming up the Mississippi.

When told by the hunters that the British had scouts watching the Mississippi, Clark decided to change his route, as it seemed very clear to him that he could not capture Kaskaskia except by a complete surprise. In order to take the British unawares, he marched straight across the wilderness, for the British would hardly dream of an army crossing the wilderness when there was a much easier route for them. It was a hundred miles overland to Kaskaskia, and a difficult journey for an army without wagons or provisions. After a terrible march through the forest, Clark's little company came in sight of Kaskaskia and the fort on the fourth of July, 1778.

Kaskaskia and Vincennes taken. He hid his men in the forest and sent scouts to reconnoiter and bring back a report. They returned with the good news that the British knew nothing of Clark's presence. Clark divided his army into two parts. One was to attack the fort and at the same time the other was to attack the village. He waited until dark, and then gave the order to rush forward. The British were completely surprised and overwhelmed, and the town and fort were taken without the loss of a man. Clark then sent Captain Helm with a few soldiers to take Vincennes. This was accomplished without a struggle.

Hamilton, who was still in command at Detroit, was much chagrined when he heard of the loss of Kaskaskia and Vincennes. He determined to win them

back. Gathering a large army of Canadians and Indians he embarked on Lake Erie for the Wabash country. They paddled up the Maumee River, crossed



THE EXPEDITION OF GEORGE ROGERS CLARK

the portage of nine miles with much labor, and floated down the branch of the Wabash toward Vincennes.

Captain Helm. The fort here was held by Captain Helm. When the French allies who were assisting Helm at the fort heard of the coming of the British, they deserted, leaving him with one lone man to hold the fort. Presently, Governor Hamilton approached with an army of five hundred Indian warriors and Canadians. He found a loaded cannon pointing out of

the open gate of the fort, and Captain Helm standing by with a lighted match in hand ready to fire. As the British drew near, Helm called out, "Halt!" Hamilton demanded the surrender of the garrison, and Helm replied in a loud voice, "No man shall enter here until I know the terms." Hamilton, believing there was a strong garrison in the fort, replied, "You shall have the honors of war." Helm then surrendered and, to Governor Hamilton's great disgust, only Helm and one private marched out and laid down their arms.

Clark at Vincennes. As the British postponed the retaking of Kaskaskia until the following spring, Clark saw his opportunity. Hearing that Hamilton had kept only a small garrison at Vincennes and had sent the rest of his army back to Canada for the winter, Clark planned to make an attack on the fort before Hamilton's army returned. "If I do not take him," said Clark, "he will take me."

Again he must surprise the enemy in order to succeed. He knew that he could not use the water route on the Ohio and Wabash rivers, because of British scouts. The journey overland from Kaskaskia to Vincennes was two hundred miles. This would have been an easy march in summer, or even in the dead of winter, when streams were icebound and prairies frozen, but Clark started in February, when the ice was breaking up and the valleys were overflowed by swollen rivers. It was a terrible march. Starvation threatened, for game was scarce. In heavy rains the men trudged on. They often waded through swamps and flooded plains

in water up to the shoulders, and camped at night without a mouthful of food. As they approached Vincennes they dared not shoot to bring down game for fear of being discovered by the British.

This time Clark sent a captured Indian ahead to warn the French people to stay in their houses while he took the British fort. At dark he marched into the town. The French retired to their houses and the village was won. Hamilton and his soldiers were completely surprised when they looked out into the moonlight and saw the "long knives" surrounding the stockade. Clark had no cannon, but his sharpshooters poured such a hot fire through the portholes that the British gunners could not hold their posts. All night the firing continued. Late the next day Hamilton surrendered, with eighty men, and Clark ran up the Stars and Stripes over the fort, renaming it Fort Patrick Henry. Hamilton was put in irons and sent to Virginia.

Clark wins the Northwest. In this way the vast country north of the Ohio (now Ohio, Indiana, Illinois, Wisconsin, and Michigan) was won for the Americans. Clark held it until the close of the Revolution, when England ceded it to the United States. Had it not been for George Rogers Clark and his brave soldiers, this great Northwest would probably have remained in the hands of the British, and our western boundary at the close of the Revolution would have been the Allegheny Mountains, instead of the Mississippi River.

Questions and Problems

1. Why was Hamilton called the "hair-buyer"?
2. Locate on a map Kaskaskia, Vincennes, and Detroit.
3. Why did Clark succeed with so few soldiers?
4. Trace his route on a map.
5. What do you think of Clark's plan of going overland to Kaskaskia?
6. What qualities had Clark that made him a great leader?
7. Locate on a map the territory that Clark won.

Books to Read

McMurry, C. A. — *Pioneers of the Mississippi Valley*, pp. 124–150; The Macmillan Company.

Nida, W. L. — *The Story of Illinois*, pp. 97–115; Farquhar and Albright.

Roosevelt, T. — *Stories of the Great West*, pp. 55–69; The Century Company.

PART TWO

SETTLING THE MISSISSIPPI VALLEY

CHAPTER XII

WAR ON THE INDIANS OF OHIO AND INDIANA

The British and the Indians. After the Revolutionary War, the British continued to hold some of the frontier posts in the northwest such as Detroit and Mackinac. They wished to keep their hold on the fur trade and were unwilling to see the Americans moving into this western country. The English officers secretly furnished the Indians with guns, powder, and lead, and then encouraged them to attack the frontier settlements. They especially urged them to prevent any pioneers from crossing north of the Ohio River.

Indian raids. The backwoodsmen sometimes punished the Indians severely for their raids, but usually the scalping parties escaped unharmed. The Indians were greatly feared because, though they were few, they moved about very stealthily. They surprised outlying cabins and did their bloody work quickly and horribly. Sometimes, however, a brave woman made good use of her rifle after her husband was slain. Stories are told of occasions when the only weapon of the wife of a pioneer was an ax; with this she would try to cut down the savages as they forced her door and entered the cabin.

Indians in ambush. The savages even skulked along the forest trails and fell upon the emigrants

unawares, carrying away many scalps and much valuable plunder. In spite of their treaty they watched closely the river route down the Ohio. Boats that floated down midstream were usually safe, but sometimes the Indians grew so bold that they set out in a

From an old print

AN INDIAN MASSACRE

fleet of canoes and attacked these flatboats in open daylight. If the current swept the boat inshore, rifle shots rang out from the tangled forests on the bank. The people and animals huddled together on board made a clear mark for the Indians. It was said that after passing the mouth of the Muskingum River

no boat was safe. The savages were lurking along the banks, and if a boat came near the shore or was driven there by the wind, the crew was attacked by an overwhelming number of red men. The Indians practiced all kinds of tricks to lure the boatmen to shore. Then they captured the boat, killed the owners, feasted on the provisions, and carried off whatever goods they could. Thus many of the emigrant families who traveled down the Ohio were cruelly slain.

After a time the boats went down the Ohio in brigades. Sometimes there were as many as sixteen flatboats and two keels in a brigade. The flatboats were lashed together three abreast. Women and children and cattle were put in the middle scows, while the men manned the outside ones and kept guard. The Indians did not attack this flotilla, because it was plainly too strong for them, and the red men had no relish for an open, even fight.

Hubbell's hot fight. One of the western emigrants, William Hubbell, built a flatboat at the headwaters of the Ohio and floated slowly toward the sunset. He had on board nine men, three women, and eight children, besides horses and household goods. After sailing and floating westward for some days he saw signs of Indians and so kept watch night and day. One morning at daylight they heard a voice from the wooded shore, and looking out saw a man there begging to be taken on board, but they refused to go near the shore. Presently, twenty-five or thirty Indians set out in canoes to follow them, firing as they came. Hubbell's men returned the

fire. Hubbell's right arm was disabled by an Indian bullet, but he continued using pistols and hurling billets of wood at the approaching savages. It was a hot fight, but he did not cease until the Indians drew off, beaten.

Of the nine men on board two only were unhurt. A little boy, who had been perfectly quiet during the battle, when it was over asked to have a bullet taken out of his head. It was found in the scalp and removed. Then the little fellow said, "'Tain't all," and he showed them his wounded arm, which had a broken bone. He had not cried because children were taught to be quiet when attacked by the Indians. The horses were all killed but one. In a space of five square feet on the outside of the boat, they counted one hundred and twenty-two bullet holes.

The white captives. When the Indians were successful they set off with their captives for the distant Indian villages near the lakes. They traveled fast, and when any of the women or children grew weary they were tomahawked without mercy. Upon reaching their villages the Indians burned some of their captives and made slaves of the others. Children were sometimes adopted into Indian families. White captives occasionally fell into the hands of friendly traders, or were carried to the British at Detroit. A few escaped, and a few were ransomed by their relatives.

Bloody ground. The name Kentucky means "dark and bloody ground." It was so called by the savages because of the many fierce battles which took place there between different Indian tribes. The horrible

slaughter of settlers in the same region made it also a dark and bloody ground for the white pioneers.

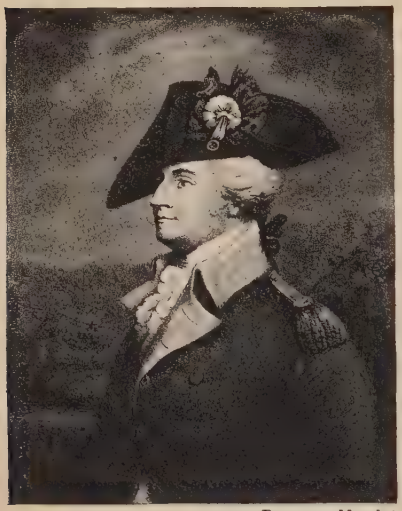
While Washington was president there arose a most deadly and cruel war between the pioneers in Kentucky and the Indians north of the Ohio River. The Indians killed in seven years more than fifteen hundred Kentucky settlers, while a great many were carried away to die by torture.

Two generals beaten. At last, in 1790, General Harmar, with United States troops, was sent against the Indians in Ohio. But Chief Blue Jacket and Chief Little Turtle were wily and treacherous warriors. They waited until Harmar had divided his troops, then they fell upon them and slew them almost to a man.

General St. Clair was next chosen to punish the Indians. He moved northward from Cincinnati to the Indian country; but he, too, was surprised by Little Turtle with a strong force of Indians and his army was routed. The savages butchered the wounded with utmost cruelty, while the remainder of St. Clair's army retreated hastily southward for safety.

Mad Anthony Wayne. President Washington was greatly distressed to hear of this second defeat. He now resolved to send against the savages the best fighter of the Indians that he could find. For this work, he chose General Wayne, who had shown such courage in the Revolution that he was called "Mad Anthony Wayne." During the Revolution Wayne had stormed Stony Point on the Hudson with a brilliant midnight bayonet charge and had captured the fort without

firing a gun. He had carried out successfully other bold attacks against the British, and now President Washington sent him to humble the victorious red men.



From an old print

ANTHONY WAYNE

Indians routed. Wayne was not only brave, but he was wise and cautious. The Indians called him the "Black Snake" and they also had another title which suited him well. It was "The chief who never sleeps." Wayne tried to make peace with the Indians without a battle, but in vain. Then he met them in the woods. The Indians, from their hiding places behind the trees, expected to pick off his men. But Wayne's men charged through the woods with fixed bayonets, and they drove the enemy from their hiding places and completely defeated them. This battle was fought in 1794 on the Maumee River in northwestern Ohio. When Wayne returned to Philadelphia after this victory he was received with great honor. The Indians were so severely punished that they made a treaty of peace which lasted eighteen years. They gave up nearly all of what is now the state of Ohio, and moved westward. After this the Ohio River route became

free from Indian attack and large numbers of people followed it to build wilderness homes in what is now southern Ohio, Indiana, and Illinois.

Questions and Problems

1. What was the best way to defend the boats on the Ohio River?
2. How did the Indians treat their captives?
3. What mistake did General Harmar make?
4. How did the Indians defeat General St. Clair?
5. What do you think of Wayne? Give reasons for your opinion.

Books to Read

Baldwin, J. — *Conquest of the Old Northwest*, pp. 203–207; American Book Company.

Dickson, M. S. — *Pioneers and Patriots in American History*, pp. 50–63; The Macmillan Company.

Hart, A. B. — *How Our Grandfathers Lived*, pp. 173–216: The Macmillan Company.

CHAPTER XIII

SETTLING THE NORTHWEST TERRITORY

Settlers of the northwest receive assistance. The pioneers of Kentucky and Tennessee had worked entirely without assistance from the mother state of Virginia, or from England, who did not want them to cross the mountains to drive away the fur-bearing animals. So they had chopped their own trails, built stockaded villages on the Kentucky and Cumberland rivers, and protected themselves from the prowling red men.

When the country northwest of the Ohio was settled the United States had won its independence, and Uncle Sam now lent a helping hand to these pioneers. United States armies under Wayne went before the settlers and drove the red men farther westward. Forts were built in which were left United States troops, who undertook to ward off the Indian attacks and to protect the settlers in their clearings. Small towns quickly sprang up near these forts.

Heroes of the Revolutionary War found themselves poor when the army disbanded, and our government had no money to pay them for their seven years of hard service. So they turned westward to the fertile lands beyond the mountains. They asked Uncle Sam to set

off a large territory to be given them in return for their services in the army. Connecticut established claims to a large tract of country along Lake Erie in northern Ohio for her soldiers. This large section was called the

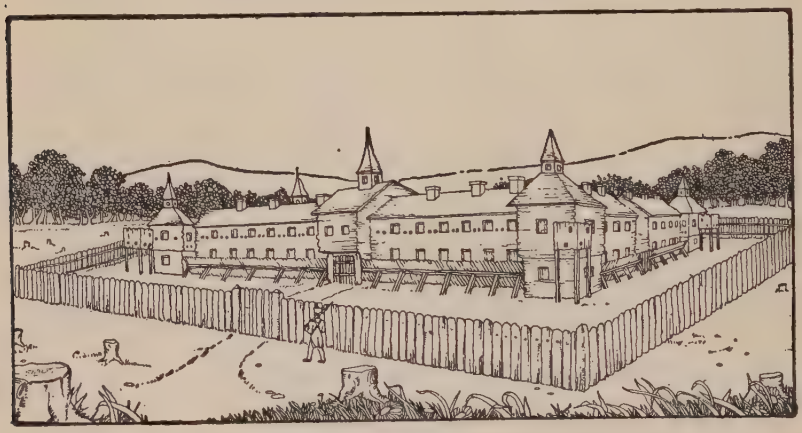
From an old print

MAKING A CLEARING IN THE WESTERN COUNTRY

Connecticut Reserve. Hither flocked many settlers from New England.

Marietta settled. As soon as Uncle Sam declared that there should be no slavery north of the Ohio River, companies began to organize to make settlements in this section. The Ohio Company bought from the government a million and a half acres north of the Ohio at seventy cents an acre. They chose their lands near the mouth of the Muskingum River because Fort Harmar stood near by.

Settlers were soon on their way to the Muskingum River. In the dead of winter, they toiled along the snow-bound roads of western Pennsylvania, reaching the headwaters of the Ohio in January and February, 1788. Here they set about building boats, and as soon as the river cleared of ice, forty-eight settlers led by General Rufus Putnam started downstream. In April, he stepped from his boat, which he called the Mayflower, upon the banks of the Muskingum.



MARIETTA, THE OLDEST SETTLEMENT IN THE NORTHWEST

The settlers went to work at once felling trees, building log houses, clearing fields, and laying out the ground plan of Marietta, their new city. They were almost all soldiers from the Revolutionary armies. It was hard and toilsome labor to clear the wilderness and found their forest homes, yet they suffered no such hardships as did the iron-limbed hunters who first built their lonely cabins on the Cumberland and

Kentucky rivers. The Marietta settlers were well protected by the fort and they were within easy reach of well-settled communities about Pittsburgh, where they could go by water.

Dr. Cutler's visit. The following summer, Dr. Manasseh Cutler visited the colony at Marietta. He wrote the story of his journey. In August, he tells us, he reached the headwaters of the Ohio for the first time and embarked on a big flatboat which had on board forty-eight people besides some cattle. They drifted down the forest-bordered Ohio, reaching Marietta in the evening of the second day. Here and there along the south shore of the river, they passed a few settlers' homes surrounded with fields of grain and young orchards. Some of these homes were squalid cabins and some were roomy and comfortable log houses.

Dr. Cutler spent three weeks very pleasantly at Marietta with his friends. He greatly admired the large cornfields, which showed that the settlers were industrious. He frequently dined with Arthur St. Clair, the new Governor of the Northwest country. He was rowed to the fort in a twelve-oared barge with an awning. The crew were well trained and a sergeant stood in the stern to steer. The dinners, he tells us, were handsomely served with punch and wine. On one occasion fifty-five gentlemen and three ladies sat down to dine together. The fort was a square with blockhouses, barracks, and artillery.

After his visit, Dr. Cutler started back upstream in the boat of a trader from Illinois. It was a big keel

boat, propelled by ten oars and a square sail, and on it the doctor had a comfortable journey. Sometimes the voyagers would go ashore and walk along the banks, shooting pigeons or squirrels and plucking bunches of grapes. Once they saw some Indians, who were chasing a deer. The red men killed it and gave our travelers some of the meat. Here and there on the shore, they passed settlers' cabins where they obtained corn and milk, and sometimes eggs, butter, or veal. Between eleven and twelve o'clock each day they stopped for dinner, which usually consisted of hot venison or wild turkey with a strong dish of coffee and loaf sugar. At supper, they had cold meat and tea.

Cincinnati and Cleveland. In December, 1788, about eight months after the settlement at Marietta, settlers arrived at Cincinnati from New Jersey. This was the beginning of one of Ohio's largest cities, which is located opposite the mouth of the Licking River. A fort called Fort Washington was built here about a year later. Three different armies sent by Uncle Sam against the Indians of Ohio and Indiana gathered at Cincinnati, and from there began their marches against the red men. While the first school in Ohio was built at Marietta, the first church appeared at Cincinnati.

In 1796, eight years after the settlement of Marietta and of Cincinnati, a party of Yankees from Connecticut started westward for the Connecticut Reserve in northern Ohio. They came by way of Buffalo, traveling sometimes by land and sometimes by water. Their leader was Moses Cleveland. They arrived at the

present site of the city of Cleveland on the fourth of July. Mr. Cleveland wrote in his journal, "We gave three cheers, and named the place 'Fort Independence.'" Counting men, women, and children, there were fifty in the party. The men were drawn up by their captain on the beach. They fired a salute of fifteen volleys. Then they drank toasts, and gave cheers for "New Connecticut," as they called their new colony.

Pioneers from the south. The hunter-pioneers from Kentucky and Tennessee admired the rich woodland valleys north of the Ohio, so well supplied with game; and the boldest of them crossed the river and began to build their cabins on the north shore. The Indians skulked about their cabins, watching for a chance to kill the trespassers. The pioneers had to build strong forts in every section where they settled, and were compelled to spend a great deal of their time within the stockades keeping a lookout for their sly enemies. Sometimes the Indians watched them so closely that they dared not go into the forest for game and consequently suffered for want of food. But when cold weather came the Indians betook themselves to their wigwams, for they disliked the cold and preferred to keep under cover as much as possible.

When the pioneers found that the Indians had left the region, they went forth with their rifles and brought in buffalo, bear, deer, and turkeys. They cured the buffalo and venison meat by drying it, made bacon of the bear meat, and stored away large quantities in

the blockhouses to use when the warm weather came and the Indians were again on the watch. Some of the more timid settlers returned to the Kentucky shore, but others continued to come, and the settlements grew stronger, and more clearings were made. In each clearing one man armed with his rifle was usually placed on watch and carefully hidden, while the others worked in the field, putting in corn and vegetables and cultivating the crops.

Kentucky trails cross the Ohio. A large number of Kentucky pioneers followed Boone's road, then crossed the Ohio at Louisville and moved northward along the wooded valleys in what is now Indiana. Every northward-flowing stream that would float a flatboat carried settlers to the Ohio region. If you will look at the map, you will observe that in western Kentucky two large rivers, the Tennessee and Cumberland, flow north into the Ohio. Many Kentucky and Tennessee settlers used these routes, coming down by boat to the Ohio and then crossing to the north side of the river. Day after day, the ferries on the Ohio at Cincinnati, Louisville, and Shawneetown were crowded with pioneers, with their wagons, carts, and goods, and sometimes with their negro slaves. Some of these travelers pushed their boats out into the Mississippi and poled northward into the Illinois Valley. In this way, Kentucky and Tennessee pioneers were pushing their way into Ohio, Indiana, and Illinois.

The settlers from Kentucky and Tennessee gradually chopped their way northward along the Wabash

From an old print

A FERRYBOAT ON THE OHIO RIVER

River, the Miami River, and the many smaller streams which flow into the Ohio from the north, and along the Illinois and other rivers which flow into the Mississippi. They did not at first venture out upon the open prairies of Indiana and Illinois. The trees upon the prairies were so scarce and stunted that these early settlers concluded that the soil there was poor, and so they called the treeless prairies the "barrens." For this reason, and also because there were certain advantages to the early settlers in being near streams and in wooded regions, some of the finest farm land in the world was passed by until every acre of the wooded valleys was taken, even though some of the latter was so swampy that it had to be drained.

The first settlers in this section preferred the wooded regions because they furnished fuel, and logs with which to build cabins, and fences for the cornfields. The thick forests also served as a wind break in winter, protecting the cabins and the domestic animals from cold winds and storms. In summer, the timber afforded shelter from the swarms of flies that infested the open prairie. The settlers spread along the rivers in order that they might have water for home supply and for their live stock.

The hunter-pioneers soon pushed on westward, leaving their cabins to the pioneer farmers, who remained and cut away the forests, built new homes, and raised good crops. How they lived you are to learn in the next few chapters.

Questions and Problems

1. Why, do you suppose, was the boat bringing settlers to Marietta called the Mayflower?
2. Why did these settlers locate here?
3. Why did the pioneers at Marietta suffer less than those in Tennessee?
4. Pretend that you are one of the pioneers at Marietta and tell the story of your experiences.
5. From what section chiefly did the pioneers of Ohio come? From what section were the pioneers of Indiana and Illinois?
6. Why did the early settlers of Indiana and Illinois prefer the wooded regions to the open prairies?

Books to Read

Baldwin, J. — *Conquest of the Old Northwest*, pp. 187–194; American Book Company.

McMurry, C. A. — *Pioneers of the Mississippi Valley*, pp. 150–170; The Macmillan Company.

Nida, W. L. — *The Story of Illinois*, pp. 116–126; Farquhar and Albright.

Wheeler, D. E. — *Abraham Lincoln;* The Macmillan Company.

CHAPTER XIV

THE CABIN AND ITS FURNITURE

Better homes. After the settler had provided the necessities for his family and when the country had become more thickly settled, larger and warmer cabins were built. The trees for the log house were uniform in thickness and were cut into lengths of twelve to fifteen feet to suit the size of the house, after which they were hauled to the chosen spot. Then a day was appointed for the house-raising, which was regarded as a holiday. All the neighbors were invited; and they were usually glad to come, for fun and pleasure were mingled with the hard labor.

The foundation logs were placed carefully in a level position and upon them the floor was laid. The floor was made of puncheons, which were slabs of hardwood sometimes three or four inches thick and five or six feet long. They were smoothed on the one side by an ax or adz in an effort to make a level floor.

The logs for the walls, having been notched at both ends, were then laid on the floor and fitted together by the notches, as closely as possible so as to reduce the size of the cracks between them. These cracks or chinks were filled with sticks which fitted them snugly. Then the walls were plastered over with

tough clay. In rainy seasons these newly built log houses often put out leaves, because the clay upon the outside furnished a soil. Then the cabin looked like a green bower. The roof was made by laying stout poles from gable to gable usually two and a half feet apart. On these, clapboards were laid, after the manner of laying shingles nowadays, and held down by other poles instead of nails.

The fireplace. After the walls were built, an opening was cut for a fireplace. Outside of this a three-

A COLONIAL FIREPLACE

sided wooden wall was constructed for a chimney. This was really a double wall with a space twelve or fifteen inches between the two. Into this space was pounded moist clay to protect the back of the fireplace.

It was much like the process we have to-day of molding a cement wall. Sometimes a chimney was built of stone or of sticks plastered with mud. The chimney tapered gradually to such a size as would give a good draft, and it was built a little higher than the roof. The hearth and the bottom of the fireplace were filled in with wet clay to the level of the floor and pounded or tamped hard with a maul. Then it was wet with water and made smooth with a wood scraper.

Sometimes the fireplace was from five to ten feet wide and in some cases it extended entirely across one end of the house. It was often large enough to receive logs of firewood six to eight feet long. For the fire there was usually a big "back stick" which might sometimes be as large as a saw log. In front of this was the smaller wood that would give a quick fire. In this way the pioneer might burn up the logs from his clearing by simply hauling them to the house and rolling them into the fireplace to be used for fuel.

Windows and doors. When the logs were all laid, openings for the windows and doors were sawed into the walls. Frames were made for the windows and doors by fastening slabs to the ends of the logs with wooden pins instead of nails. At first there was no glass for windows. They were covered with greased paper or perhaps greased deerskins, which admitted some light and kept out the storm. The door was made of rived or split boards held together by cross pieces fastened with wooden pins. The door was hung on great wooden hinges. A wooden latch was

fixed to it on the inside; this latch could be raised from the outside by a latchstring, which passed through a hole above the latch to the outside. At night the string was drawn in for safety; but there was a common saying among neighbors and friends that the latchstring was always out for them. The early pioneers were noted for their hospitality and good cheer.

Most cabins contained a loft or attic story which was reached by a rude ladder in the corner. The loft usually furnished sleeping quarters for the boys of the family. In many cases all slept in the middle of the floor.

Furniture of the cabin. The furniture of the pioneer home was rough and crude. It was all made at home, from trees from the forest. Beds were built in one corner of the one-room home. The framework of the bed was fastened to the wall and was supported by props at the corners. Across this framework was stretched woven bark or deerskin thongs to bear the bedding. The covering or bedding was usually made of the skins of animals; but there was sometimes a choice coverlid brought from the east or south. When guests appeared at the pioneer cabin they were given the bed, while the family found places for themselves in other corners of the room or in the loft.

The chairs were merely three-legged stools. Sometimes a more prosperous settler might have a hickory chair with a splint bottom, but these were few. Stools and benches split out of logs usually served for seats. So huge was the fireplace that sometimes the ends of

the back log served as seats. Tables were often made in the same manner as stools. Over the door was the gun rack made by driving prongs of deer antlers into auger holes. Here the rifle and powder horn rested. Forked or crooked branches of trees were driven into the wall to hang clothes upon.

Over the fireplace was a mantel which was colored sometimes a dark blue with the dye of indigo. On the mantel was usually a candlestick or possibly an old clock. Sometimes there were also a few books. In summer two or three crocks planted with morning glories might be seen on the shelf, with vines hanging downward and hiding the fireplace like a curtain.

Lighting and heating. The great fireplace furnished the chief light in the home, but there were also tallow candles. The early settlers became very skillful in candle making, and candle molds with balls of cotton wicking might be seen in every home. A good lamp was molded from clay in the form of a cup, and then burned hard. This was then filled with bear's oil, and a cotton wick placed in it. Such a lamp gave a very good light. The cotton for wicking was often grown in the yard of the cabin.

In those days there were no matches. So it was a difficult matter to start a fire. If one allowed his fire to die out in the fireplace it might be necessary to trudge to the nearest neighbor and borrow some coals to rekindle it. But the pioneer could start a fire with steel and flint, using a sort of punk found in the knots and trunks of trees. The fire was started from sparks

given off by the flint when it was struck with a piece of steel. A small bit of the punk, which had to be kept dry, was held close to the flint and a shower of sparks falling upon it caused it to take fire. Immediately dry leaves were thrown upon the blaze, and it was fanned by a turkey wing. Then dry kindling was thrown on, which speedily brought a good fire. Some pioneer cabins were more comfortable than others, but they were all cheerless and cold compared to most of the homes of to-day.

Questions and Problems

1. How did the log cabin differ from the "half-faced" camp?
2. How did chimney building of those days differ from that of to-day?
3. How did the fireplaces of the pioneers differ from ours?
4. Describe the interior of a log cabin home.
5. What do we mean to-day when we say "the latch string is out"? Where did the saying originate?
6. Write five other questions to be answered in class, beginning each question with *how* or *why*.

Book to Read

Bass, F. — *Stories of Pioneer Life*, pp. 79–90; D. C. Heath and Company.

CHAPTER XV

PIONEER FOOD AND COOKING

Articles of food. The pioneers worked hard; still, for weeks at a time, the first settlers had scarcely any other food than deer, bear, or wild turkey meat. Bread was scarce until they could raise their first crop of corn. Sometimes they mixed a little meal with roasted acorns and made a sort of bread called ash cake. In spite of this meager and unusual diet their appetites were good. Indigestion was seldom heard of in those days.

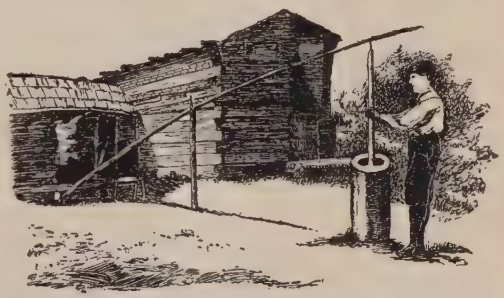
After their first crop of corn was grown, they had corn bread and plenty of hominy. To their wild meat they soon added that of the duck and chicken. They found bee trees in the forest and secured honey. They raised beans and pumpkins together with potatoes and other vegetables, but dishes made of corn were the chief articles of food. Corn dodgers, boiled squirrel, and sassafras tea made a company dinner. As soon as wheat was grown, biscuits and pies were made on Sundays.

Grating corn. When the corn was still green they grated it and used the pulp for hoe cakes. They made their grater from a piece of old tin bucket, which they punched full of holes with a nail. This grater was fastened over a wooden frame. The soft corn rubbed

on the rough side passed through the holes and fell into a bowl or pan.

Grinding corn. For grinding corn, the pioneers used a large block of wood about three feet long which they called a hominy block or mortar. It was burned and hollowed out at the upper end to form a sort of dish, wide at the top and narrow at the bottom, to hold the corn for pounding. A smaller block of wood used for crushing the grain was called a pestle. In the autumn, while the corn was soft, this block and pestle did very well for making meal for johnny cake and mush, but when the corn became hard the process was too slow.

A sweep and mortar. Then instead of using the pestle they had an arrangement, called a sweep, for pounding the grain into meal. A pole about thirty feet long of some springy or elastic wood like hickory, was used. The heavier end was placed under the side of the house to hold it down. The pole was supported about one third the distance to its end by two forked props slanting together. To the smaller end of the pole, which was suspended about fifteen feet from the ground, was fastened a piece of sapling eight or ten feet



THE OLD SWEEP AND MORTAR WERE USED FOR GRINDING CORN IN THE EARLY COLONIAL DAYS

long and five or six inches in diameter. The lower end of this sapling was shaped to answer for a pestle. In order that two people might pull down on this pestle, a wooden pin was put through the sapling at the proper height. Now by pulling together, two men could bend a large pole far enough so that the pestle would strike the block or mortar on which the corn was placed. The springiness of the pole pulled the pestle up, so that the workers needed only to pull it down swiftly and let go. This made the work of grinding much quicker and easier.

The hand mill. The hand mill was even better than the grater or the mortar. It was made of two circular flat stones, one of which turned on the other and ground the corn between them. The lower stone was called the bed stone and the upper one the runner. These stones were placed in a broad hoop or band to hold them in a flat position while the upper one was being turned. A hole was made in the runner near the outer edge. Another hole was made in a board fastened to the ceiling above the middle of the runner. A staff or pole extended from the hole in the ceiling into the hole in the runner. This enabled two men to work together in turning the stone. There was another hole made through the center of the runner to receive the corn, which was fed in by hand. About four bushels of corn could be ground in one day. Grinding with such a mill was tiresome work, but this was considered a great step forward in the milling industry. Such hand mills may be seen to-day in Palestine.

The water mill. After the country became more settled, men began to take up the milling business. Finding rapid water along the stream, they built a dam and water mill which soon did a thriving business. Any farmer was glad to have a mill built upon his land if there was a good site for one. Grists were carried

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AN EARLY AMERICAN WATER MILL STILL IN USE

on horseback to this mill. People came twenty or thirty miles to get their corn and wheat ground. Often they had to wait three or four days for their flour or meal, as there were other farmers before them and grinding was slow. The men and boys camped about the mill until their turn came. They had to bolt or sift their own wheat and corn. For this purpose they made sifters of deerskins stretched over a hoop. Through the skin were many small holes made by a hot wire.

At the water mills the miller usually took one sixth of the grain brought as toll to pay for the grinding. But at horse mills and later at steam mills the toll was one fourth. People were accustomed to complain that the miller took too much toll. However fair and honest a miller might be, he was always suspected of being a rascal.

Sometimes when the streams were flooded or when the water was low, the housewives ran short of meal. Then they borrowed from one another until the last sack was used up, or perhaps they would bring the old block from its cover, to grind by hand. In the dry weather of late summer the wives often made succotash, which was a mixture of corn and beans. In this way they pieced out their supplies until the rivers rose so that the mills could turn again.

Curing meat. Each year the pioneers laid in a good stock of food for the coming winter. They were very skillful in curing meat. Ashes of hickory bark were gathered and stored away in a dry place. At hog-killing time the choicest hams were selected, and when they had been salted, smoked, and dried, they were laid away in the hickory ashes until the following spring, when they were ready for the table. These hickory hams were very choice. They had a pleasant odor and a delicious flavor. So prized were they that they could seldom be bought in the market.

Orchard and gardens. As soon as possible after their arrival, the pioneers planted orchards and vineyards, and as the soil was rich it was not long before apples,

peaches, and grapes grew in abundance. Later the pear tree was introduced. The finest cider was made, and the vineyards furnished delicious wine. The garden was carefully tilled; all kinds of vegetables were grown, and a portion of the ground was usually given to flowers. The tomato was early brought here from the south. But for a long time it was grown merely as an ornament; nobody ever thought of eating it. It was many years before this delicious food was used on the table.

Keeping fruit. Settlers kept fruit through the winter by digging great pits in the ground, placing the apples in them, and covering them deep enough to be out of the reach of frost. Throughout the long winter, such pits furnished refreshments for the cold evenings. Many of the apples were made into cider, of which the settlers were very fond. Other kinds of fruits, as well as pumpkin, were preserved for winter use by drying.

Home utensils. The most important tool of the early pioneer was his ax. He needed it not only in clearing his land for crops, but in making utensils for use about the home. With this he made large and small trays from soft poplar, buckeye, or basswood. He hewed bowls and trenchers from maple logs for use in the kitchen. These were made smooth by burning and scraping.

Gourds of every shape and size were raised. A gourd was hung beside the spring or well for a dipper and one was also found near the cider barrel. Gourds were used at the table and at the sugar camp. Some-

times they made a wash pan out of a large gourd by splitting it in half. The grandmother used a small one over which to darn stockings, and the baby used another for a rattle. Even the small boy started on his afternoon of fishing with his bait in a gourd.

A WOODEN YOKE FOR CARRYING WATER

Cream was sometimes churned by being put in a trough and stirred with a paddle. Often it was necessary to carry water for some distance in buckets. For this purpose a yoke was fitted across a man's shoulders with a deerhide thong hanging from each end and from these were suspended two pails of water, while the hands were still free to carry two more.

Pioneer cooking. In the fireplace was a crane made of wood. From the crane, pots were hung over the fire for cooking purposes. Pot hooks were made of forked sticks. When brick chimneys came into use, many years later, there came also a swinging iron crane which was fixed in the masonry and could be moved forward or backward over the fire.

Some of the poorer settlers had brought but a single skillet to their new homes. So they made pots of clay with their own hands. These served the family until they could get iron ones. The clay pots were not glazed as our earthenware is to-day, so that when meat was cooked in them the grease came through the pores to the outside, where it was continually on fire.

In better homes some of the cooking was done in large kettles hung on pothooks over the great fire in the fireplace. Meat was often cooked in a long-handled frying pan which was placed upon live coals on the hearth. This pan was also used for baking pancakes, which were called flapjacks. Bread was sometimes baked in the frying pan. Johnny-cake was baked on a board about ten inches wide and fifteen inches long, rounded at the top. The thick cold dough was placed on the board, which was then supported against a chunk of wood very near the fire. When one side of the cake had browned the other side was turned to the blaze.

When a johnny-cake board was not to be had, a hoe without a handle was cleaned and greased with bear's oil. The dough which was baked on this metal surface

Photo by Elmendorf. © *Ewing Galloway*

THE KITCHEN OF AN EARLY AMERICAN HOUSE BUILT BY A WEALTHY DUTCH FAMILY

Notice the Dutch oven at the left of the fireplace.

was called a hoecake. If the housewife had neither a johnny-cake board nor a hoe, the dough was wrapped in cabbage leaves or fresh corn shucks and laid in the fireplace or on the hearth, where it was covered with live coals until it was thoroughly baked. This was called an ash cake. A better way of baking was in a covered skillet called a spider. This vessel stood upon feet and was heated on the hearth with hickory coals placed both underneath it and on top.

Dutch ovens. The more prosperous families built Dutch ovens, which were convenient in summer time. They were made of small bowlders and tough clay, beaten into shape and burned and hardened by a slow fire built inside. This oven was usually set upon a wooden platform some distance from the house so as to avoid danger from fire. It looked very much like a bee-hive. When it was to be used, it was first thoroughly heated by building a fire inside. When the oven was hot the fire was raked out and the bread and pies were put in on the floor and baked by the heat left in the oven walls. Later this type of oven was built indoors beside the fireplace.

Questions and Problems

1. How does our way of making bread differ from that of the pioneer?
2. Make a model of a sweep and mortar.
3. Describe a hand mill and its use.
4. Make a model of a water mill or show how this can be done.

5. How do our ways of preserving meat differ from those of the pioneer?

6. Describe the methods of preparing and cooking food in pioneer days.

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 116–120; Ginn and Company.

Nida, W. L. — *Following Columbus;* The Macmillan Company.

Sparks, E. E. — *The Expansion of the American People*, pp. 149–158; Scott, Foresman and Company.

CHAPTER XVI

THE CLOTHING OF FRONTIER SETTLERS

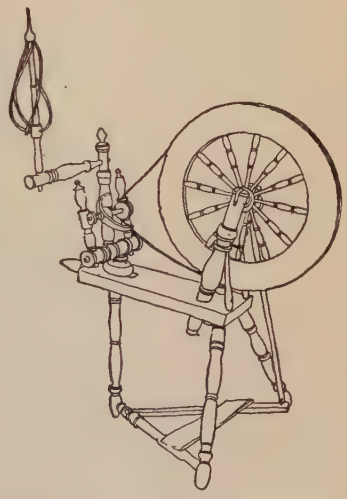
Homemade clothing. The homemade clothing of the early pioneers was well suited to the kind of life they lived. No attention was paid to style, but materials were selected which wore well. Besides deerskin, linsey was the principal material from which clothing was made. Linsey was a combination of flax and wool, the flax being used for the chain and the wool for filling. Nearly every woman was a weaver. Linsey was warm and comfortable. Sometimes the flax crops failed or the sheep were destroyed by wolves; then deerskin was used for clothing.

Women's styles. The usual dress of the pioneer woman was a waist and skirt attached, called a frock and habit. Sometimes a petticoat was worn over a long loose dress, very much like the modern kimona. In cold weather a waist or jacket was added to the skirt. This was sometimes fastened with pins and sometimes with buttons. For handkerchiefs they used small squares of cotton cloth, which were made by their own spinning and weaving. Elderly women wore caps night and day. Squirrel skins were used for gloves; they were as soft as the best kid and wore well. Shawls of wool of various colors with fringe were used for wraps in cold weather. In winter they wore thick quilted hoods and in summer simple sunbonnets.

The dress of children. Boys and girls dressed exactly like their fathers and mothers, and looked old long before they were really grown up. When the boys were ready for trousers, they did not have knee pants as we have to-day, but put on full length pantaloons. As the boys were growing very fast, pantaloons had to be made several sizes too large, so that the lad would not outgrow them before they were worn out. Sometimes they were big enough for two boys. For dress-up clothing on Sunday the older boy had a suit of brown or blue jeans, of which he was very proud. The trousers were rolled up over his cowhide boots, and were very baggy at the knees.

Clothing of a later date. Sheep began to appear in sufficient numbers about 1820, so that cloth made of wool was used to a greater extent than formerly. Flax was also grown, and in many places the settlers tried to raise cotton. When the flax crop failed they went to the creek bottoms and gathered loads of nettle stocks from which they made a coarse cloth. From this nettle cloth they made trousers, towels, bed-ticks, and the like. Flax was very important, because it formed the chain of most of the woven fabrics until cotton came into general use. As soon as transportation improved, the coonskin cap, with tail dangling down behind, was put aside for wool or fur hats. Moccasins gave way to boots and shoes. The linsey frocks for women disappeared and gowns of calico took their place. Hats of straw began to appear. Those for everyday use on the farm had broad brims.

Spinning and weaving. The women spent a large part of their time preparing clothing for the family. Spinning, weaving, and knitting were never-ending tasks for the household. As the children grew older they were expected to help the mother in much of the hard toil. Wool was carded or combed by hand combs and made into rolls. These were then spun into thread on a big wheel. There were big wheels for spinning yarn, and little wheels for spinning flax. The hum of these could be heard throughout the long days. In the attics of many old houses of to-day we may see these queer spinning wheels.



AN OLD-FASHIONED SPINNING WHEEL

Then there was a loom for weaving, which was very large and clumsy. Sometimes several families owned one in common, for a single loom could supply enough cloth for all of them. Since it took up so much room in the cabin, it was used only during certain periods and then taken apart and stored away. With these machines fine blankets, jeans, coverlets, and curtains were made. A coverlet woven in complicated figures is much prized to-day. The mother and daughters usually cut and made all their own clothing, after having made the cloth.

Dyeing cloth. For coloring cloth they used such dye-stuffs as the hulls of walnuts or the inner bark of certain trees. In some sections the dark brown of a black walnut was commonly used, while in other places the lighter brown tints of the white walnut were more popular. The favorite color perhaps was indigo. Sunday suits and garments for special occasions were often dyed with this. Indigo could be purchased at the village store, but many settlers grew their own plants and made the dye. There were other dyes from madder and copperas, or from maple bark and copperas. These colors were often used with blues and browns in making striped or checked linseys. Stockings were dyed after the knitting, but most things were dyed in the yarn.

Tanning leather. Every family tanned its own leather. As animals were killed, the skins were preserved by salting and drying. When they were ready to tan, the hair was first removed by placing them in wet wood ashes or in a vat of lye for a certain time. This loosened the hair so that it could easily be taken off. The skins were then put in another vat which contained a liquid made of black oak bark. The tan vat was a large trough sunk to the upper edge in the ground. Bark was easily obtained when land was cleared and fenced in the spring. The bark was dried and in wet weather it was shaved and pounded on a block of wood with an ax or mallet. The skins were allowed to remain in this bark liquid for several months, after which they were taken out and scraped and softened. Bear's oil, lard, and tallow were used to soften

the leather, being applied until the skins were smooth and pliable. Homemade leather was blackened by a mixture of soot and lard. From such leather the pioneer made his buckskin suit, his boots, shoes, and the harness for his horses.

Family shoes. Every family had its shoemaker. Those who could not make shoes, could make shoepacks. These were made like moccasins with a single piece of leather. The shoepack also had a tongue, a piece of leather on the top of the foot, about two inches wide. The seam behind was like that of a moccasin. Sometimes a sole was added. In later days a traveling shoemaker went from house to house to make or mend shoes. The women made all the clothing except the shoes.

Questions and Problems

1. What was the pioneer woman's share in the preparation of clothing for the family? Explain the processes.
2. What had sheep and flax to do with the pioneer's clothing?
3. Find pictures of people in pioneer dress and bring them to class.
4. Bring to class a sample of pioneer clothing or weaving if you can find one.
5. Visit any home or museum that has a hand loom and note how it is made.
6. Describe pioneer methods of tanning leather and of dyeing cloth.

Book to Read

Earle, A. M. — *Home Life in Colonial Days*, pp. 166–251; The Macmillan Company.

CHAPTER XVII

OCCUPATIONS OF PIONEER MEN

The clearing. A frontier settler found himself surrounded by the unbroken forests. In every direction there was a great sea of trees with a thicket of underbrush. In these deep woods, the pioneer began to chop his way and clear a little field where he might locate a home and raise a patch of corn. In some sections, all trees less than a foot and a half in diameter were cut down with the ax; while all over that size were deadened, either by girdling with the ax or by burning them about the roots. The deadened trees fell, a few at a time, as the years went by. So it was necessary to go over the clearings very often to remove or burn the fallen trees. Those which the pioneer chopped down were cut in convenient lengths, either for a log house or for rolling in a pile to be burned.

Logrollings. On an appointed day the neighbors gathered for a logrolling. They rolled and piled the scattered logs which were to be burned. Timber, which to-day would be worth twice the value of the land it was on, was in those days burned up as quickly as possible in order to make a clearing. Sometimes the logs lay so thick upon the ground that a man might walk

all over a large field without touching the ground. As late as the year 1840 certain farmers of Indiana rolled logs as many as twenty-five days in a year. A man who

From an old print

LOGROLLING

was eager for office went far and wide to logrollings in order to cultivate friends and win votes.

Sometimes a farmer was not able to clear his ground of logs in time for planting his crop, so he cultivated his corn among the fallen logs, stirring the soil with a hoe. Some farmers felled the trees in windrows and planted the corn in open spaces between them.

Hunting wild game. In the early years the men and boys spent much of their time in the forests and on the prairie in search for game. The woods and prairies were full of bear, deer, buffalo, pheasants, and wild turkeys, while the creeks and rivers abounded with wild geese and ducks. Wild pigeons were so numerous that the sky was sometimes darkened by the tremendous flocks which passed overhead. Hunting in certain seasons was hard labor. When the streams were overflowing their banks, the hunter in a flat country often had to wade all day through the water. In winter, when heavy snows covered the ground, it was difficult and tiresome to follow the game.

Torch hunting was a favorite method of killing deer. A hunter set out at night and floated quietly down a stream in his light canoe with a burning pine knot or torch flaming from the bow. When a deer came to the water's edge to drink, he was dazzled by the light of the torch and would stand gazing at it till the well-aimed rifle of the boatman brought him down.

White men soon learned from the Indians how to jerk venison. A quarter of dried venison hung from the rafters of almost every cabin, and it was the custom to slice off pieces to chew, a piece being frequently offered to a visitor.

A man could often stand on his doorstep and shoot deer on the edge of his clearing. They came to the salt licks in great numbers all through the warm seasons of the year, and the poorest marksman could not fail to bring home a supply of venison from a watch at the

licks. A certain pioneer in Brown County, Indiana, shot thirteen deer in one morning. In early spring droves of them, too lean for good meat, might be seen wandering into the wheat fields, and the farmers had to drive them away with hickory rattles to save their crops.

Fur-bearing animals. Besides the animals whose meat is good for food, the hunter spent much time catching fur-bearing animals. There were many kinds of animals that were wanted for their pelts. Besides the bear, wolf, deer, buffalo, lynx, and wild cat, there were the opossum, beaver, otter, martin, mink, raccoon, and muskrat.

Wolves were so numerous that the government encouraged killing them by offering a bounty for their skins. In many sections the wolves had to be killed off before sheep and pigs could be raised. They often attacked larger animals and even men. A farmer of Warwick County, Indiana, who turned his horse out to graze one night found only the bones the next morning. Exciting wolf hunts sometimes took place, in which hundreds of men and dogs were engaged. In this way wolves were finally driven away from the settled communities.

Other enemies of the farmer. Squirrels were so numerous that they often destroyed an entire crop of corn. The woods and prairies swarmed with them. Hundreds were killed by men and boys armed with clubs. But in spite of all their efforts, the squirrels ate much of the corn crop each year. Raccoons also

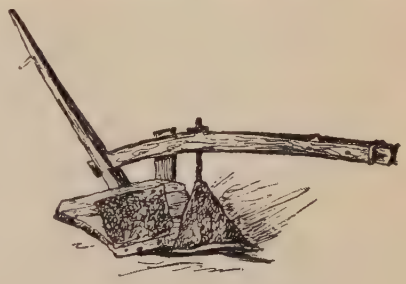
devoured green corn. Foxes killed the lambs and pigs. We are told that even the turtles in the pond were skillful in catching the young geese and ducks. With so many enemies the pioneer farmer seldom rested.

Domestic animals. Horses, cattle, sheep, and hogs, as well as fowls, were raised. The cows and horses were small, because they did not have proper care and shelter in winter. Cattle were left outside in the coldest weather and fed upon corn fodder, as hay was scarce for many years. In summer, the cattle were turned out to range in the woods with bells hung about their necks. Horses were belled and hobbled. Each farmer knew the tinkle of his own bells. Hogs roamed freely in the forest, where they fattened upon the acorns and nuts, and by winter time they were in fine condition for killing. Some pioneers earned the price of their land merely by raising hogs in the woods.

Farm implements. The pioneer farm was a little world of its own. Almost everything used by the family was made from the products of the clearing and the forest. A very good plow was made with a wooden mold board. When the iron plowshare was first made, the point and the share were one piece. So when the point was worn out, the whole plow was worthless. There were several kinds of plows, but all were rude and clumsy.

Plowing with such rough implements was hard work, and in newly cleared ground it was dangerous; because when the plow struck an unseen root or stump with

great force, it gave the plowman a severe jerk. It was a standing joke among the pioneers that certain plows would "kick a man over the fence, and kick him after he was over." In a few years this crude plow disappeared, and the Cary plow came in. It was more like the hand plow in use to-day. About 1840, the Cary plow gave place to the cast-iron plow. The shovel plow was a favorite in early days.



A WOODEN PLOW

The early harrow was made from slippery elm or iron wood, usually in the form of an "A." Both frame and teeth were of wood. Pitchforks were made entirely of wood — from the forked boughs of a dogwood sapling. Wooden rakes of strong seasoned wood were very useful tools. Even spades were fashioned from good hickory which had been well seasoned, and when kept oiled they lasted for several years. Every farmer who owned horses or cattle had his rough wooden sleds. All farm implements were pinned together with hickory pins inserted into holes that were burned out, for the early pioneer had no auger. Even settlers of later years had but few tools. A farmer's tool chest was considered well provided if he had a hand saw, a crosscut saw, broad ax, auger, chisel, and drawing knife. These were willingly loaned from one farm to another throughout the neighborhood.

Harness. Single-trees and double-trees were made much as they are to-day, except that hickory withes took the place of the iron clips and rings. Horse collars were made of corn shucks covered with rawhide. Bridles, too, were manufactured from rawhide. The forest was searched to find roots of trees that were properly crooked to fit the collar for hames. These were fastened at top and bottom with leather thongs.

Wagons. In those early times there were no wagon or blacksmith shops. The truck wagon, with its rude wooden wheels, was in common use. The wagon was drawn along by plodding oxen, pulling together in a heavy wooden yoke with hickory bows around their necks. Most of the teaming was done with oxen. The wagons were used for hauling wood, gathering corn, and doing other farm work. So loud was the squeaking of the axles when these wagons were heavily loaded, that it could sometimes be heard for a mile.

The whipsaw. The whipsaw was a great help to the later pioneer in finishing his log house and in supplying lumber for the outbuildings. There was plenty of timber of all kinds, but yellow poplar was usually chosen because it was easy to saw. The whipsaw was much the same as the common crosscut saw of to-day in shape and in handle. Its teeth were so formed and filed that it would cut the timber the long way.

The log was placed on a scaffold. In order not to make the scaffold too high, a pit, two or three feet deep, was dug underneath for the under sawyer to stand in. The top sawyer stood on top of the log. In this

way the big log was divided into thick slabs. This method of sawing was very slow work, but a large amount of lumber was not needed. In a few days two

Courtesy of Criterion Theater Publicity Dept.

OXEN DRAWING A COVERED WAGON

Notice the wooden yokes on the oxen

men could saw from these soft poplars enough planks for their use. The top sawyer looked after the gauge used to make the plank the same thickness throughout. As he was on top he did not get sawdust in his nose and eyes as the under sawyer often did.

As the country became more thickly settled these whipsaws were in great demand, and a good saw pit scaffold was in use nearly all of the time. When Abraham Lincoln's mother died in 1818, it is said one of these whipsaws was used to rip from a black cherry log the planks which were used to make her coffin. Young Lincoln was then a lad of only ten years, but he never forgot the sad experience of watching his father make the coffin out of the green lumber.

The chief crops. The earlier settler plowed the ground as best he could, but with such tools as he had it would be called a poor job nowadays. During the first few years, there was little harrowing done, because of the roots and stumps in the field. Grain was sown broadcast, that is, scattered by hand. It was covered by dragging brush over it. The chief crop at first was Indian corn, but some years later farmers began to raise wheat, and mills for grinding and bolting flour became common. Corn ripened about one hundred days after planting. An old French missionary wrote back home about the American cornfields, saying, "There are no fields outside of Paradise so beautiful as these." Flax was grown for making linen. Oats, potatoes, hemp, and pumpkins yielded good crops in the rich new soil.

The harvest time. The harvest season for wheat and oats was a joyous time in spite of the hot weather. It was looked upon as a kind of summer festival. Five or six farmers of the neighborhood usually worked together, going from field to field reaping and shocking

the grain as they went. At first the work was done with a sickle and rake, which was slow and tiresome. But after a time came the cradle, which enabled the farmers to work much faster. A half dozen cradles in a line slashing down the grain was an interesting sight.

There were often contests of skill and endurance to see who could cradle the most grain. Farmer boys were ambitious to become expert cradlers. The harvesting on a single farm lasted perhaps two or three days. When the last shock was capped and the tools were stacked around it, the men and boys formed a circle, and at a signal from the captain the harvesters gave three cheers. If the echo came back three times it was considered a good omen for the next crop. A blast from a horn at the cabin was heard in answer and the harvest was over. This little ceremony was known as the "stubble call."

In later times the harvest season was a time of good living. The best cooks in the neighborhood vied with one another in the preparation of the best meal, and the workers lived on the fat of the land. In some communities it was thought that the harvest could not go on without the drinking of liquor. In others buttermilk was served. About four o'clock in the afternoon it was the custom to send to the men a light lunch, with coffee. At sundown an elaborate supper awaited the workers. The table was bountifully supplied with the best to be had, and a dessert of delicious pastries ended the meal. Meals were usually served out-of-doors.

Questions and Problems

1. Why were logrollings great occasions in the pioneer days?
2. What do you think of torch hunting?
3. Tell how you would plan a wolf hunt.
4. Compare the pioneer's tools and implements with those of to-day.
5. Which would you have preferred if you had been a pioneer, an ox team or an automobile? Why?
6. Tell all you can about the crops raised by the pioneers of this region.

Book to Read

Hart, A. B. — *How Our Grandfathers Lived*, pp. 143–171; The Macmillan Company.

CHAPTER XVII

OTHER ACTIVITIES OF PIONEER LIFE

Amusements. Many of the sports of the pioneers grew out of hunting and war. Boys were taught to use the bow and arrow at an early age, and they soon learned to shoot well. Another pastime of the boys was imitating the call of every bird and beast in the woods. This was not only sport but a part of their education, and it often proved useful. They learned to gobble like the wild turkey and in this way coaxed these wild birds within reach of their rifles. They would bleat like a fawn until the mother deer came near enough for them to shoot her. A hunter often collected a flock of owls in the trees about his camp by making sounds which attracted the birds. He could also call so as to get a reply from the wolves. In this way he could tell where they were and avoid them.

The boys and men of those days enjoyed running, jumping, and wrestling matches. When a boy reached twelve or thirteen years of age he was given a small rifle and a shot pouch. Then he became a fort soldier, and had a porthole in the fort assigned him. He soon became expert with his gun by practice in hunting squirrels, turkeys, and raccoons. When boys and girls

came together in a social way their chief amusement was dancing. Singing was another very pleasant amusement among the first settlers in the west.

The most common sport among the men when they had plenty of powder and lead was shooting at a mark. They usually fired from a rest and at as great a distance as the gun would shoot on a level. They often put moss or some soft substance under the gun upon the rest so that the barrel would not spring back when fired. When the rifle was held against the side of a tree for a rest it was pressed very lightly for the same reason. With this practice they became very accurate in their aim.

PIONEER DANCING PARTY

The bee line. Having no sugar, the pioneer was much interested in honey bees. He located a bee tree

by watching and following a bee which he had, perhaps, captured and sprinkled with flour. Or perhaps he made a "sweet bait" which he placed on a stump at the creek or spring where the bees came to get water. When the insect had gathered its load of sweets it flew in a "bee line" for its tree home. By carefully watching the direction taken, the keen woodsman could locate the tree, which he marked with his ax.

A bee hunter's mark was as sacredly respected as the mark of the owner on horses and cattle. In September the owner cut down the tree. This was sometimes an exciting occasion and the whole family took part. At dusk, or early twilight, they went to the bee tree to watch the hunter chop it down. Sometimes several gallons of honey were found in a single tree. In this way the settlers were supplied the year round.

Maple sugar. An important industry in the early spring season was the making of maple sugar. Large groves of sugar maples were left standing when the surrounding forests were cleared away. In the spring the trees were tapped four or five feet above the ground. This was done by boring a hole into the sapwood and fitting into it a tiny trough sloping outward far enough from the tree to allow the sap to fall into a receiving trough or vessel. Short logs were split in halves, hollowed out, and used as troughs. These were placed beneath the dripping sap to collect it. These troughs were often boarded around to keep the hogs from drinking the sap.

Each morning the sap was collected in a barrel

placed on a sled, which was drawn from tree to tree by an ox team. In the sugar camp the sap was boiled down, thus driving off the water and leaving a syrup or sugar. Sugaring-off time was usually an occasion

From an old print

MAKING MAPLE SUGAR
The hollow log is used for collecting the sap

for merrymaking. The Indians were as fond of maple sugar as were the white men. More than one old chief, who was sent westward by the government, wandered back to his former haunts in search of maple sweets.

Hunting ginseng. In the wooded regions much time was given to digging ginseng, which was used in making certain drugs. It brought good prices and, what was most unusual, was paid for in cash. Men and boys spent days in the forest hunting and digging for the roots. It really required a keen woodsman to discover the plant. In later years it was a custom among some farmers to grant the boys three days each season to dig "seng." In this way the lads earned a little pocket money, which they were free to use as they pleased.

Salt works. At first, salt was brought on pack horses to the western settlements at very high prices. It was much more costly than sugar is nowadays. Later, the pioneer learned where the salt springs were by following the animals there, and was soon able to furnish his own supply of salt by boiling down the water of the springs. These places were called salt licks.

Camping at the salt licks. It was customary for the pioneers to make a journey to a salt lick once a year. These journeys were usually made in companies to guard against an attack from the Indians. The men camped at the springs until they had made a year's supply of salt. The process of making salt was easy though slow. The salty water was put into large kettles and boiled until the water disappeared and the salt was left in the vessel. So important were the salt licks in those days that when Uncle Sam made treaties with the Indians, sending them beyond the Mississippi, the red men insisted, as a part of the treaty, that the

government should furnish them each year with a good supply of salt.

Later the pioneer learned to bore deeper into the earth and obtain water that was richer in salt. A regular salt industry was started on the Salt River in Kentucky. From here salt was carried to the different settlements in the west between the Ohio and Cumberland rivers.

The traveler. A distant journey was carefully planned. A horseback rider, in winter, protected his legs by wrapping. In his bulging saddle bags he carried his clothes, shaving outfit, and other articles. Settlers traveling by wagon often carried live coals with them so that they might not lose time in making a fire by the slow method of flint and steel.

The tavern. Travel westward on the leading roads increased rapidly, and some families who lived along the way opened taverns for the travelers. The best cook soon became known, and her inn was selected as the goal for a day's journey. In this way it was not very long before there were numerous taverns which provided lodging as well as food for the traveler. These early hotels were log, frame, or sometimes brick structures with a wooden piazza in front. Hung upon a tall post at the side appeared a sign board, often with a picture of Washington, Jackson, or some other noted man upon it.

Wagoners driving mules and oxen to the river towns with loads of produce frequently stopped at a tavern. Yards were provided for the wagons and for the hogs

that were being driven overland to market. In the stable the horses were sheltered and well fed upon corn, oats, and hay.

After a hard day's journey, often through mud and rain, the traveler found in one of these inns a welcome resting place. The tavern keeper was, as a rule, jolly

A WAYSIDE INN

and hospitable, and his good humor was appreciated by the weary guest. It was not long before he was comfortably seated by the big open fireplace, while a boy stripped off his leggings, took his great coat and hat to dry them, and replaced his wet shoes with a pair of "pumps." Then there was a glass of something warm to take off the chill. When he wished to wash, he was directed to a wooden trough at the well behind

the house, and when he wished to retire, he was led to a bedroom.

Upon the top of the tavern there was a small bell which was rung at mealtime. The boarders, high and low, rich and poor, all gathered around a table and partook of the generous supply of corn bread, chicken, eggs, venison, bacon, preserved fruits, buckwheat cakes, and honey which was usually served them.

The trading habit. Whenever people came together in the settlements there was trading. If two pioneers met on horseback on a lonely trail they sometimes challenged each other to "swap" horses. Or if one had a cow he was ready to part with her on favorable terms. The people even made trades at church. In the frontier towns the public square on Court Day became a general market place.

The country store. Every little country store kept powder, lead, salt, iron, leather, and liquor. Anyone wishing these articles exchanged for them such products as beeswax, tallow, feathers, ginseng, furs, deerskin, and wild hops. Later, stores carried a larger line, including knives, shears, sickles, augers, trace chains, and other hardware. They also carried calico, fine cambric, pins, needles, and perhaps a little broadcloth. At such a store, the young woman got her wedding garments, and the young man his coat of blue cloth, with yellow metal buttons, high rolling collar, and forked tail.

In those days, coffee, tea, sugar, and tobacco were luxuries and could be had only at fabulous prices. On the other hand, farm products were ridiculously

cheap. It took eight bushels of corn to buy a yard of calico, eighty bushels to buy a yard of silk, and one hundred bushels to buy a yard of broadcloth.

Buying on credit. After the settler had paid for his quarter section of land at the government price of a dollar and a quarter per acre, he usually had very little money left. So it was necessary to buy many needed things on credit. Merchants and business men gave credit freely; and they in turn, when making their purchases from eastern houses, also received long credit. In this way, the pioneer was helped along until he could get a foothold. About the only articles that could not be bought on credit were powder, shot, liquor, and salt. An editor once offered to accept corn, ginseng, honey, flour, or pork in payment of subscriptions to his paper.

Produce shipped out. It was not many years before the pioneers were able to raise horses and hogs on their pasture lands and forest ranges. Then salt pork, lard, tallow, and dried beef were shipped to the market. Tobacco, corn, flour, whiskey, flax, and rope from the hemp fields were also ready to export. When Spain was friendly, much of this produce went down the Mississippi and found a ready market at New Orleans. It cost a great deal to ship articles upstream and over the Alleghenies to the eastern seaboard.

Questions and Problems

1. Tell how the pioneer boy hunted wild turkey, deer, and other game.

2. Why was maple sugar so important in those days? What other sweets did the pioneers have?

3. Imagine you have been camping at a salt lick and write a letter to your mother telling about your experiences.

4. Compare traveling by land in pioneer days with that of to-day.

5. Why did the pioneers have the "trading habit"?

Books to Read

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Hart, A. B. — *How Our Grandfathers Lived*, pp. 143–171; The Macmillan Company.

Nida, S. H. — *Letters of Polly the Pioneer;* The Macmillan Company.

CHAPTER XIX

TRAVEL BY WATER

Going to market. For many years it was difficult for the western pioneer to get his farm products to market. He had either to haul them a great distance to Cincinnati, St. Louis, or Chicago, or to take them to a navigable stream and sell them to merchants who shipped them by flatboat to Cincinnati, Louisville, St. Louis, or New Orleans. All the streams flowing into the Ohio were alive with flatboats. The hills echoed with the songs of the flatboatmen on their voyage to far-off New Orleans. In these days of railroads we are likely to forget how important boats were in pioneer times.

The flatboat. It was quite an undertaking to make one of these flatboats. Two long timbers, called gunwales, were first procured for a frame upon which to construct the boat. After being hewn down to a thickness of one foot, the gunwales were hauled to the river bank and placed bottom upward on rollers, about fourteen or sixteen feet apart, which was to be the width of the boat. Strong girders, or crosspieces, were then framed into the gunwales a few feet apart, and fastened securely by strong wooden pins.

The frame was now ready for the bottom, which was

made of lumber an inch and a half thick and long enough to reach across the frame from one gunwale to the other. These planks were fastened to the frame with wooden pins and calked, or made water-tight. The flatboat builders used hemp for calking. They

RAFTS MADE OF LOGS AND BOARDS WERE THE ONLY MEANS OF TRAVEL ON THE WATER UNTIL BOATS WERE MADE

drove it into the cracks between the edges of the planks with a calking chisel made for that purpose. When the first bottom was complete, another bottom of one-inch lumber was made over the first. It held the calking in place and made the bottom stronger.

The launching. At this stage the boat was ready for launching. As the bank of the river sloped, the boat, on rollers, was pushed down into the water with-

out much effort. Now, as the boat had been made bottom upward, it had to be turned over. Since it was large and heavy, this was no small task. The builders placed on one edge of the boat a large amount of mud and dirt, which was intended to sink that side. Then a strong rope or cable was fastened at the middle of the opposite edge. The line was then carried over a large limb or the fork of a tree, and two or three yokes of oxen were hitched to it. The pull of the oxen turned the boat right side up, but as it was then full of water it had to be bailed out.

On the river. A trip on a flatboat was a lively adventure. A full rigged flatboat was provided with four oars by which it was kept in the current of the river, or rowed ashore. The oars on either side were large and were called "sweeps." A long oar at the stern was used as a rudder, and sometimes a shorter oar in front, called the "gouger," was also used in steering. Sails were sometimes used, but the current was the usual means of carrying the boat forward. The dangers to the flatboat lay in the logs just under the surface of the water, and in reefs and sandbars in the river.

Sometimes it was difficult to get the boat over a sandbar. One end of a strong rope was tied to a tree or stump on shore, and the other end was attached to a reel on board the boat. As the boatmen wound the reel the boat was pulled over the sandbar.

When Abraham Lincoln was a young man, he piloted some of these flatboats with produce to New Orleans.

The vessels usually traveled in fleets of eight or ten, starting on their voyage in the early spring. They were very strong and could carry large cargoes.

When the early western farmers had carried their produce to New Orleans in this way, they sold their boats and returned home, frequently afoot. The entire journey sometimes took several months. The flatboatmen of the upper Ohio got home in a roundabout way. They took passage on ships sailing from New Orleans to Virginia, or Maryland, and then crossed the mountains on horseback to Pittsburgh.

The keel boat. The keel boat was an improvement over the flatboat. It was covered so as to protect the cargo from rain, and would carry from fifteen to forty tons of freight in its hold. The crew of a keel boat numbered anywhere from six to eighteen men and was divided into two companies, one to operate each side of the boat. They propelled the boat by means of long iron-pointed poles which they set against the river bottom at the prow of the boat, on the command of "set" from the captain. They then walked slowly from prow to stern on narrow platforms called running boards, pushing the boat forward as they walked. When the captain shouted "lift" they drew their poles out, walked back to the prow, and repeated the motion.

Upstream. It was easy enough to navigate these boats downstream, but when they were loaded with merchandise at New Orleans and were bound for St. Louis or Louisville, the boatmen had a difficult task

before them. In the larger and deeper streams it was necessary for the keel boats to hug the shore closely, so that the crew could reach bottom with their poles, and thus avoid the current. Sometimes they pulled themselves upstream by seizing hold of bushes or branches of trees along the shore. This was called "bushwhacking." At other times the boat was towed up the river by the crew walking along the shore and tugging with a strong rope.

The progress was slow indeed. A boat that left New Orleans about the first of March might not reach the falls of the Ohio at Louisville until July, or even as late as October. Three months was considered a quick voyage up the river from New Orleans. The crews were often rough and lawless; and the river trip was full of danger on account of the Indians and robbers that infested the banks. The keel boat drew but little water and for that reason could navigate practically all of the small tributaries of the Ohio. It was of great value in carrying salt from the licks to the early settlers.

Trading boats. In autumn and spring, the Ohio was covered with trading boats. They were loaded with flour, liquor, cider, apples, bacon, iron, glass, earthenware, and cabinet work. At each landing or settlement a whistle was blown and the people flocked to the shore to exchange farm produce for the articles they needed. It was here they received much news from the other river settlements and from the states back east.

Questions and Problems

1. Why were the rivers so frequently used by travelers in pioneer days?
2. Why was it difficult to launch a flatboat?
3. What is a sand bar and why is it dangerous?
4. How was a keel boat propelled upstream?
5. Why do we not have trading boats to-day as the pioneers had?

Books to Read

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Hart, A. B. — *How Our Grandfathers Lived*, pp. 81–142; The Macmillan Company.

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CHAPTER XX

THE FIRST STEAMBOAT ON WESTERN RIVERS

Robert Fulton. Robert Fulton invented the first steamboat, the *Clermont*, which made its maiden voyage on the Hudson in 1807. After this success other steamboats were built to run on eastern rivers. Fulton knew how greatly steamboats were needed by the pioneers on the Ohio and Mississippi to bring their supplies up from New Orleans, so he resolved to build a boat for this trade.

THE CLERMONT

Now the current of the Hudson is very gentle on account of the ocean tide that ascends the river nearly to Albany. The currents of the Ohio and the Mississippi are much swifter, and many people believed that the steamboat would fail when it tried an upstream voyage on these rivers. The engines for the western boat would have to be much more powerful; and would be much more expensive, as there were no

machine shops for building engines in this region. It was a costly experiment to build a boat at Pittsburgh, and few people were willing to risk so much money in this way.

Nicholas Roosevelt explores the Ohio. However, Robert Fulton and Robert Livingston of New York, who had worked together in the building of the *Clermont*, decided to have an examination made of the western rivers to see if there was any reason why steamboats might not run on them. They sent Nicholas Roosevelt to Pittsburgh in the spring of 1809, to make this study and report to them about the currents and sand bars and anything else that might hinder steamboat service on the Ohio and Mississippi.

Mr. Roosevelt and his young wife reached Pittsburgh in the early spring. He set about building a flatboat for a six months' journey to New Orleans. On the boat was built a huge covered box in which were a bedroom, a dining room, a pantry, and fireplace where the cooking was to be done. The crew consisted of a pilot, three hands, and a man cook. Each night they landed and tied the boat to the shore. Mr. Roosevelt kept searching carefully for sand bars and other obstructions in the river.

The party reached Cincinnati without mishap and received a hearty welcome. But when they told the merchants there of the plan to build a steamboat to run up and down the river, the merchants thought they were crazy. The old river men said nobody but a lunatic would attempt this; but Roosevelt was not

discouraged and continued downstream, making a careful survey of the river, until he reached New Orleans in December. From there he and his party took passage on a sailing vessel bound for New York.

Reaching that city in due time, Mr. Roosevelt made his report to Mr. Fulton and Mr. Livingston, and they all agreed that a steamboat could be built to run up and down the great western rivers. Mr. Fulton set to work at once making plans for the boat and its engines, and early in the spring of 1810 Mr. Roosevelt went to Pittsburgh to build the first steamboat on the Ohio.

Building a steamboat at Pittsburgh. Pittsburgh at that time had no shops that could do the necessary iron work for the boat, and there were no ship carpenters or machinists west of the Alleghenies. But the required workmen were brought from New York, and Mr. Roosevelt began his big task. A level spot was chosen near the bank of the Ohio and the keel was laid for a vessel one hundred and sixteen feet long and twenty feet wide. As there was no suitable lumber at hand, workmen were sent up the river to cut timber from the forests. The logs were floated down to the shipyard where they were sawed into boards and timbers in the old-fashioned saw pit. Floods covered the shipyard several times and almost carried away the unfinished boat. At last, in September, 1811, the boat was launched for its perilous voyage. She was named the *New Orleans*. Few people believed she would ever reach that city. A trial trip up the river

was first made, and it was observed that the pilot at his wheel easily managed the boat in the current. Mr. Roosevelt now made ready to depart with a crew of fifteen men.

A dangerous voyage. A great crowd gathered on the river bank and cheered the *New Orleans* as she steamed off down the Ohio at a speed of eight or ten miles an hour. Mrs. Roosevelt had embarked for this trip in spite of the fears of her friends, who had threatened to imprison her until the boat put off. Mr. Roosevelt was so anxious that he was unable to sleep the first night out. He paced the deck or remained by the pilot until morning. The steamer reached Cincinnati the second day, having passed many a keel boat and flatboat on the way down. The people of this city were still dubious. Some said, "We see you for the last time. Your steamboat may go down the river, but as to coming back up, the very idea is absurd." They believed that it was the last steamboat that they would ever see on the Ohio, for if it was not able to return, no other boat would try it.

A day later, the boat reached Louisville, where it could not ride over the rapids on account of low water. While waiting for the river to rise, Mr. Roosevelt decided to try it upstream, and in a few days the *New Orleans* appeared again at Cincinnati, to the great amazement of the people. The boat then returned to Louisville, and shortly after the river rose high enough for her to attempt to ride the rapids. A special pilot was secured who knew the safest channel; and putting

on all steam, the boat, with spray dashing over the deck, shot the rapids. She plunged forward each instant as though she was going to the bottom. Everybody aboard grasped hold of the rail to keep from tipping overboard, but the steamer dodged every danger and presently drew up at a landing below the falls to discharge the special pilot.

The worst part of the trip now seemed to be over, but there was still plenty of excitement all along the journey, for no one knew when the boat would be stranded on a sand bar or on some tree trunk hidden just beneath the surface of the water. About once each day she stopped for wood for fuel; this was cut from the banks by the crew while the boat lay at the landing. The Indians along the river were greatly astonished to see this monster puffing out sparks and smoke.

At length the steamer reached New Orleans, where there was much rejoicing. The boat was put on a regular schedule, running between Natchez and New Orleans. A few years later she sank after striking a snag in the river, but she had made many trips and had brought to her owners more than enough money to pay for her cost.

Steamboat trade in the west. Soon other and better boats appeared on the Mississippi and her tributaries, and the number grew rapidly. For a time flatboats increased in numbers along with the building of steamers, but at length steamboats became more numerous, being valued especially for upstream ser-

vice. The flatboats, however, flourished for many years on the hundreds of smaller rivers where the steamers could not ply, and where the settlements were so sparse that there was not enough trade to make steamboats pay.

The steamboats were loaded with passengers bound

From an old print

ONE OF THE FIRST STEAMBOATS ON THE MISSISSIPPI RIVER

for the west with their stock and household effects, some going down from Pittsburgh and others ascending from New Orleans. Articles of food and clothing could now be shipped by sea from the Atlantic states to New Orleans and then brought up the Mississippi in steamboats at a far cheaper rate than the same goods could be carried overland to the headwaters of the Ohio.

Still calico was worth three dollars a yard on the upper Missouri, while it could be bought for less than fifty cents in New York; the difference was the cost of transporting the goods. A beaver skin was worth three dollars in New York and fifty cents on the Missouri. Thus we see price was largely a question of transportation.

Dangers to steamboats. These early steamboats were not well suited for river use, because they were copied from deep sea vessels and drew too much water. During the summer when the river was low they were useless. Most of them had stern wheels, because Fulton had a patent on side wheels, and made shipbuilders pay to use them. Early steamboats were poorly built and met with many accidents. Boilers sometimes blew up, and often the boats were stranded on sand bars or tree trunks hidden under the water. They moved upstream at the rate of two or three miles per hour.

Life on board. A writer of that day gives the following description of a boat's human cargo: "In the cabin you will find ladies and gentlemen of various claims to merit; on the forward part of the boat the sailors and firemen full of noise and song, and too often of liquor; while above in the deck cabin there is everything which may be called human — all sorts of men and women of all trades, from all parts of the world, of all possible manners and habits. There is the half horse and half alligator Kentucky boatman, swaggering and boasting of his prowess, his rifle, his horse, and his wife. One is sawing away on his wretched

old fiddle all day long; another is grinding a knife or razor; here is a party playing cards; and in yonder corner is a dance to the sound of a jew's-harp."

Mississippi packets increase. By 1844, the steamboats on the western rivers numbered two hundred and fifty. Many of these were fine vessels, and afforded comfortable accommodations for passengers. They were as handsome as the best packets in any part of the world. More than fifteen thousand persons were employed on these boats at this time in the west. We are told that the steamboat tonnage of Great Britain was then only two thirds of that of the Mississippi Valley. This increased until the swifter railroad transportation came to replace it.

Questions and Problems

1. In what way did the Hudson River differ from the western rivers for steamboating?
2. What do you think made the people of Cincinnati so pessimistic about steamboats?
3. Imagine you are traveling on the New Orleans steamer and write a letter describing the journey.
4. Find out how boats going upstream get by the rapids of Louisville.
5. How do you think the flatboatmen liked to have steamboats on the western rivers?
6. Steamboats decreased in numbers after a time. Why?
7. Which do you think is more costly, to ship by water or by railroad? Why?

Books to Read

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CHAPTER XXI

THE ERIE CANAL

The Mohawk portage. From the Hudson River there was an easy passage to the west by way of the Mohawk Valley and over the low divide. For this reason New York City and Albany expected the trade from the Great Lakes and from the western part of their own state. Some of it was going down the St. Lawrence. This was especially true of heavy articles, which could be taken more easily by water to Quebec than freighted overland by wagon or pack horse to the Mohawk and the Hudson. And some of it was going down the Susquehanna. On one occasion two hundred packs of beaver skins from western New York went down the Susquehanna River and across to Philadelphia. The people of eastern New York resented this, because they thought that this trade belonged to them.

They also awoke to the fact that wheat and flour from western New York were going down the Susquehanna to Baltimore. Some of the farmers built rough boats which they called arks. In these they carried their produce, from two to five hundred barrels of flour at a time, down the Susquehanna. These boats were taken to pieces when they reached their desti-

nation, because they could not be propelled up the swift streams; but the farmers found that even then they were saving money in transportation.

The Great Lakes country was now being settled rapidly, and there was much farm produce to be shipped east to market. So the New Yorkers began to talk about building a canal from Albany west to Buffalo. Lake Erie, they said, would furnish plenty of water if only it could be tapped with a canal. The lake is five hundred and seventy-three feet higher than tidewater at Albany. Governor Morris believed that it would be easy to dig a canal with a gently sloping bottom, deep enough to float boats. In this way, he thought, the water from Lake Erie would flow down to Albany.

Clinton's Ditch. The man who did most to bring about the Erie Canal was DeWitt Clinton, who became Governor of New York about that time. Clinton and his friends pointed out that it cost thirty-two dollars at that time to carry a ton of produce one hundred miles by wagon. They said that where canals were in use, a ton could be carried one mile for one cent, or one hundred miles for one dollar.

Lake Erie is three hundred and sixty-three miles west of the Hudson River, and to build such a long canal in those times was indeed a stupendous task. When the surveyors came, using their levels and driving stakes in the woods and swamps, the people ridiculed them. They said that the canal would cost too much money; that it would take too long a time

to build it; and even though the canal were dug it could never be made to hold water. They called it "Clinton's Ditch." The country through which the canal was to pass was rough and hilly in places, and the people asked Governor Clinton if he thought he

From an old print

THE ERIE CANAL AS IT LOOKED IN ITS EARLY HISTORY

In the foreground are the Little Falls of the Mohawk River

could make water run uphill. He replied that he could do even better; he could build locks and make the water raise the canal boats over the hills.

Governor Clinton gave so much time and thought to the project that he has ever since been given the honor for this splendid achievement. In April, 1817, through his influence, the New York legislature passed

a law to dig the long ditch, and on the Fourth of July of that year, the first spade was driven into the earth.

Digging the canal. First trees were cut down, and a roadway sixty feet wide was made. In the middle of this roadway, a section forty feet wide was to be dug out for the canal. The builders soon saw they must have better tools, so they sent to Europe for powerful machines that could draw out stumps and pull down the largest trees. These machines had wheels sixteen feet across. A special plow was made, with a sharp blade to cut through the small roots in the earth. The workmen blasted through ridges of rock and built aqueducts to carry the canal across rivers. They built locks of solid stone to raise boats over the hills. To-day engineers do much more wonderful feats than these, but a hundred years ago this was almost beyond belief.

Clinton thought that it might take ten or fifteen years to build the canal, but it was finished in eight years. As one section after another of the canal was completed, the water was let in. To the surprise of those who were disposed to ridicule the great work, the ditch was found to hold water; and presently boats were busy on the finished sections hauling produce from one town to another. The entire canal from Buffalo to Troy on the Hudson was completed in the year 1825. This splendid piece of work had cost a little less than eight million dollars. Now that it was done and a success, everybody spoke in praise of it. The croakers who had ridiculed it could not be found, and every-

body agreed that DeWitt Clinton was a great and wise man.

The celebration. The people arranged for a great celebration to rejoice over the finished work. Boats

THE ERIE CANAL, BEGUN UNDER THE DIRECTION OF GOVERNOR DE WITT CLINTON IN 1817 AND COMPLETED IN 1825

were made ready at Buffalo to carry Governor Clinton and other guests to New York City. In those days the telegraph was unknown and a strange method

was used to send from one end of the canal to the other the news of the opening of this great waterway. Along the way cannons were stationed a few miles apart, so that the sound of one would carry to the next. As the boats entered the canal, the first cannon was fired, the next one then followed suit, and so the glad tidings were carried along the line of cannon all the way to the sea. Soon the good news came booming down along the cliffs of the Hudson to New York City. It had passed from Buffalo to Sandy Hook in one hour and twenty minutes.

As one of the boats was about to depart from Buffalo, two kegs of Lake Erie water were put aboard, and two barrels of fine apples, which had been produced in an orchard near Niagara Falls. One of these barrels was intended for the Town Council of Troy, and the other for the city officers in New York. If we should pass through this country of northern New York to-day we should find it covered with great orchards, famed far and wide for their splendid apples.

Among the little fleet of canal boats there was one called Noah's Ark, which had on board two eagles, a bear, some fawns, fish, and birds, and two Indian boys. These were being carried to New York as products of the west. As the boats came to the towns along the way, there was a noisy celebration, which was accompanied with much excitement in the larger cities of Rochester, Syracuse, Utica, and Albany. Salutes of guns were fired, prayers and speeches were offered, and the people feasted in honor of the event.

The most joyous affair of all was held in New York City, where the people undertook to honor the occasion with a pageant. A special boat carrying many beautiful ladies passed down through the bay to Sandy Hook, where it was met by a messenger from Neptune, the god of the sea. Neptune's messenger inquired what the errand was that led them to his master's realm. It was here that Governor Clinton emptied the two kegs of Lake Erie water into the Atlantic, as a symbol of the joining of the Great Lakes and the ocean.

In the evening, the sky above New York City was bright with fireworks, and the bells of the City Hall were rung several hours. The people thought the illumination very grand, but we should no doubt consider it a dim affair, compared with our magnificent electric lights of to-day.

Commerce on the canal. From this time on nothing more was heard of sending fruit and grain from western New York to Philadelphia or Montreal. Freight rates to the city market were so cheap that a farmer who had been selling his wheat at thirty cents a bushel now received a dollar for it. Farmers along the canal sometimes built their own boats, and loading them with produce from their farms, took them down to New York. It was a glorious trip to the great city for western farm boys, and many wonderful sights met their view.

Passenger service. Not only was the canal used for the transportation of freight, but also for passenger service. People enjoyed traveling on it, for the journey from New York City to Lake Erie was an easy, com-

fortable one. It was not long before there were many passenger boats, called packets, moving along the canal from city to city. The people thought that these

AN EARLY PASSENGER BOAT ON A CANAL

packets moved with wonderful speed, although the law allowed them to go only five miles an hour, as there was danger, if a greater speed should be made, that the boats might drive the water too strongly against the banks and wash them down. Travel on

these packets was at the rate of five cents a mile per person, with berth and meals included.

The journey from New York to Buffalo took six days, almost a week; while the Empire State Express now covers the same distance in less than nine hours. Perhaps the time did not seem so long to the travelers of those days, because to most of them the scenery was new and as interesting as a visit to a foreign country. From Utica to Syracuse, a distance of fifty miles, the country is level. But on approaching Rochester the tourists looked down with amazement on the tops of the trees below. Then they had the delightful experience at Lockport of passing through a long row of locks to the top of the cliffs; and at Buffalo they beheld the great fresh-water lake.

Branch canals and cities. After a few years branch canals were built, extending north or south from the main canal. These branch canals reached up into the hills and were fed by great reservoirs, which were built upon the hilltops to make sure that there should always be water enough for the dry seasons. Great cities grew up quickly along the canal route. Rochester's business increased rapidly, as did that of Syracuse; and Buffalo grew by leaps and bounds into a great city. As for New York, the canal helped to make it the largest city of America.

Questions and Problems

1. Why did the people of New York wish a canal from Albany to Lake Erie?

2. Make a drawing showing how locks are used.

3. What is your opinion of Governor Clinton?

4. What other way of sending the news from Buffalo to New York might have been used?

5. Examine a map of New York State and trace the canal route.

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CHAPTER XXII

OTHER CANALS

A canal to Pittsburgh. The business men of Philadelphia could not sit idly and see their rivals at New York grow rich upon western trade, in which they thought they should share. So Pennsylvania was soon busy at work building a system of canals to connect different parts of the state with Pittsburgh. From Harrisburg a canal was built westward along the Juniata River to its source in the mountains, and west of the mountain ridge was another branch of the canal to the Ohio.

The portage railroad. As it was impossible to build a canal entirely across the mountains to the headwaters of the Ohio, the backbone of the mountains was traversed by a portage railroad. It will be interesting to follow an emigrant in his journey westward over this route.

"Jesse Cheesman loaded his boat, which he called the *Hit or Miss*, on the Lackawanna River in northeastern Pennsylvania. He had on board, besides his wife and children, household furniture, pigeons, and live stock. He sailed down the river till he came to the Pennsylvania Canal at Harrisburg. Here his craft was taken into the canal, which he followed westward

to its end at Hollidaysburg on the east side of the Allegheny range, where he expected to sell his boat.

"But he found at this point a curious portage railroad thirty-six miles long, leading over the mountains to Johnstown on the other branch of the canal. The railroad agent told Cheesman not to sell his boat, because he would have to buy or build another on the west side. He said he could take Cheesman's family over the mountains, boat and all, if he would put the vessel on wheels. This was done and the vessel and cargo started over the Alleghenies on the railroad. Horses and mules served as engines on some of the level stretches of track of this portage railroad, and stationary engines pulled their car up the steep inclines by winding up a long cable, one end of which was tied to the car. Up each side of the mountain range there were six inclines where stationary engines were necessary on account of the steep grades.

"Cheesman's boat, starting at noon, rested at night on the top of the mountains, like Noah's Ark on Ararat. This was done, too, without disturbing the family arrangements of cooking, eating, and sleeping. The next morning the boat was let down in the same manner into the Ohio Valley, was launched in the canal at Johnstown, and sailed for Illinois."

In crossing this portage railroad, Cheesman's boat was hitched to twelve different stationary engines, twelve mule teams, and nine locomotives. There were fifty-four men and drivers operating the road: twelve engineers and twelve firemen for the stationary engines,

nine engineers and nine firemen for the locomotives, and twelve mule drivers.

The Pennsylvania Canal brought a rich trade from the western frontier to the markets of Philadelphia. This route was also taken by thousands of emigrants who wished to build homes on the sunset frontier. It carried most of the travel that had before gone over the Pennsylvania wagon road. Charles Dickens, who wrote the *Christmas Carol* and other good books for boys and girls to read, passed westward over the Pennsylvania Canal and the portage railway.

As the canal soon robbed Forbes' and Braddock's roads of much of their travel, so in turn the Baltimore and Ohio Railway, a few years later, took most of the traffic away from the canal.

The craze for canals. It was not long after the Erie Canal was completed before the people in Ohio, Indiana, Illinois, and Wisconsin began to build canals to connect the Great Lakes with the Mississippi. Ohio built a canal from Cleveland along the Cuyahoga River to the headwaters of the Scioto River, which it followed down to the Ohio River at Portsmouth. Another canal was built across the state from Toledo along the Maumee and Miami rivers to Cincinnati. Towns grew up at once along the canals in the forests and on the prairies.

The Wabash-Erie Canal. In Indiana the Hoosiers planned to dig a canal from the Ohio River along the Wabash to Toledo, to give their farmers easy transportation either to the Great Lakes or to the Missis-

sippi; but they soon found there would not be enough water in dry weather and the project was never completed.

The Illinois-Michigan Canal. The people of Illinois succeeded in building a canal from Chicago to connect with the Illinois River. Uncle Sam gave to the state two hundred and twenty-five thousand acres of public land along the route of the proposed waterway to help build it. Farm lands in those days could be bought for two dollars an acre, so we can see that the sale of even this great amount of land would not go far toward building a canal. Illinois was forced to borrow several million dollars to complete it. A great debt was piled up in trying to build this and other canals, until the state owed fourteen million dollars. The men who had bought the state bonds took possession of the Illinois-Michigan Canal and completed it in 1848. It was one hundred miles long, sixty feet wide at the surface, and six feet deep. It cost in all six and one-half million dollars. But in thirty years it had earned enough money, together with the amount received from the sale of the public lands, to pay off all its bonds. So now it belongs to the state of Illinois.

Illinois celebrates. General Thornton was the first to pass through the canal, and the event was celebrated along the way by booming cannon, speeches, and many joyful meetings. This water road brought a great deal of business to Chicago. It gave the farmers and merchants along its route cheap transportation for their produce and goods, and it caused a wonderful boom in

real estate all along the line. When the first barge of lumber from Chicago arrived in Ottawa, the price dropped from sixty dollars a thousand feet to thirty dollars. This shows how much cheaper it was to carry heavy goods by water than by wagon.

Railroads substituted for canals. A few years later the railroads took most of the traffic away from the canals, which now are for the most part abandoned. But a good many people think they should have been kept in use, because transportation by water is cheaper than by rail and might reduce the price of certain articles, such as coal.

Questions and Problems

1. Why was it harder to build the Pennsylvania Canal than the Erie Canal?
2. What was a "portage railroad" and why was it necessary?
3. Why were not locks used in the Pennsylvania Canal?
4. Write a letter describing your journey, supposing you were a son or daughter of Jesse Cheesman.
5. Why are the western canals so little used to-day?

Books to Read

Beard, C. A., and Bagley, W. C. — *The History of the American People* (Revised Edition), pp. 232–252; The Macmillan Company.

Hulbert, A. B. — *The Paths of Inland Commerce*, p. 128; Yale University Press.

CHAPTER XXIII

STEAMBOATS ON THE LAKES

Sailing vessels on the lakes. It was some years after the *Clermont* appeared on the Hudson that a steamboat first plowed the Great Lakes. Before this time sailing vessels were used on the lakes to carry the traffic of furs and skins; as well as stores of supplies for the military posts and settlements in the west, such as fish, lumber, staves, and household goods.

THE "WALK-IN-THE-WATER"

The *Walk-in-the-Water*. The first steamboat on the lakes was called *Walk-in-the-Water*. This is how it got its name: When Fulton's first steamboat, the *Clermont*, passed up the Hudson in 1807, an Indian stood upon the river bank and gazed long and silently at the vessel moving upstream without sails. He observed the paddle wheels slowly turning and saw that as each paddle struck the water the vessel moved forward. Finally he exclaimed, "Walks in the Water!"

The *Walk-in-the-Water* was launched near Buffalo in May, 1818, and was completed in August of the same year. The deck was one hundred and thirty-five feet long and thirty-two feet wide. The boat carried sails to be used when the wind was favorable. Her paddle wheels were placed amidships, the machinery was below the decks, and she had a long smoke-stack. A Frenchman, upon seeing the vessel for the first time, exclaimed: "Jean, Jean, just see! what are these Yankees sending us now but a sawmill!"

The *Walk-in-the-Water* started on her first trip up the Niagara River from Black Rock just above the Falls. Many people lined the shore to wave farewell to the first steamboat to ply on Lake Erie. The engines puffed and fumed, and clouds of dense smoke and red-hot cinders poured from her stack. Presently she met the swift current of the river. The wheels of the little boat churned the water into foam, but could make no progress. The twenty-nine passengers on board were beginning to wonder how the boat was ever to reach the open waters of Lake Erie, only a few miles away. But Captain Fish thought of a plan.

He sent a strong rope ashore by two skiffs, one end of the rope being securely fastened to the boat. To the other end was hitched a yoke of oxen, which tugged steadily along the shore at the end of the long towline. The united strength of the oxen and of the steam engine moved the vessel slowly forward and it finally reached the lake.

On board was a small cannon, a four pounder,

mounted on wheels and securely fastened on the forward deck. In those days there were no steam whistles, so the cannon was fired half an hour before the ship was to depart. A mile away from a village, it was fired to let the people know the *Walk-in-the-Water* was coming. Two or three years later during a severe storm on the lake this historic cannon was lost overboard.

Arriving off Cleveland. The *Walk-in-the-Water* stopped at Dunkirk and Erie, and arrived off Cleveland about noon of the following day. The people along the lake shore saw the curious vessel moving westward with what they thought was great speed — about ten miles an hour. They noticed the huge pipe from which rolled forth a dark cloud of smoke, and they could not explain the strange sight. "What is it? What makes it go? Where did it come from?" cried the people on the shore. "It's the steamboat! That's what it is," called others in reply. And there were cheers and general shouts of welcome when the first steamboat reached Cleveland.

At Detroit. From Cleveland her prow was steered toward Sandusky Bay and then northwestward, among the islands of Lake Erie, straight for the Detroit River, where she anchored during the night. As she proceeded up the river the next day, the Indians gathered upon the shore to marvel. They had been told that a great big "fire canoe" was to come from the "noisy waters" by order of the Great Father, and that this canoe would be drawn through the Great Lakes by big fishes called sturgeon. This, they thought, was the story coming true.

During her stay at Detroit, the boat was visited by many people, some of whom came from quite a distance beyond the little settlement. A number of Indians made bold to go on board and examine the boat. While they were looking at the engine, which they were told pulled the boat along, the engineer, in sport, lifted the safety lever and let off steam under great pressure. The noise was startling. The Indians sprang for the shore in mad haste and ran up the hill, nor did they stop until they were out of sight of the white man's "big canoe." For a long time after this no Indian dared approach nearer to the hissing monster than the top of the hill.

Difficult landings. As there were then on Lake Erie no good harbors except river mouths, and no docks or landings, the *Walk-in-the-Water* anchored as close to shore as the depth of the water permitted. The captain then launched small boats to carry the passengers and goods ashore. When they reached the beach, the sailors took the women and children on their backs and waded through the surf to dry ground. If the weather was stormy or the lake too rough to make a safe landing, the passenger remained on board for the return trip and landed several days later. People of those days did not seem to mind a delay of a few days. But now that we can go from Chicago to New York in twenty hours, if our trains are delayed an hour there is much complaint.

Speed of the boat. The *Walk-in-the-Water* made the round trip between Detroit and the Niagara

River in about nine days. Much time was spent making landings, taking on wood for fuel, and lying at anchor or at the wharves. Coal was not used on the frontier in those days. So farmers along the lake delivered wood for a dollar or two a cord, at the regular stopping places of the boat. Sometimes the boat's crew had to go ashore and cut wood while the boat waited a half day or more. Her average speed was about seven and a half miles an hour, which was thought remarkably fast in those days. The *Walk-in-the-Water* continued in service for three summers and then was wrecked in a storm and driven high upon the beach near Buffalo. Steamboats on the lakes rapidly increased in numbers, and were presently carrying many emigrants toward the west.

Questions and Problems

1. What advantages has a steamboat over a sailing vessel?
2. How else, than by cannon, could a signal have been given?
3. What do you suppose the Indians thought of the steamboat?
4. In what ways was steamboating on the lakes different from steamboating on the Mississippi?
5. Do you think the steamboat at once drove out sailing vessels on the lakes? Give reasons for your answer.

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 213–219, 236–241; Ginn and Company.

Hulbert, A. B. — *The Paths of Inland Commerce;* Yale University Press.

CHAPTER XXIV

WESTWARD ON THE LAKES

Settling the lake shore. Thousands of emigrants from New England and northern New York now made their way to Buffalo, which was the northern gateway

THE NORTHWEST TERRITORY

to all the western country. Thousands more from across the ocean landed first at New York or Quebec, from whence they journeyed to Buffalo and then westward on the lakes. Some stopped at Erie or Cleveland,

others at Sandusky or Toledo, where they pushed southward into Ohio and made homes. Cleveland stood on a bluff where, at this early date in the history of the middle west, could be seen, from a distance, the dome of the courthouse and the spires of four churches.

In 1833, eleven steamboats carried forty-three thousand emigrants from Buffalo westward. Two years later four hundred vessels sailed from Buffalo crowded with passengers. The streets of the town were choked with wagons loaded with furniture, household goods, and farming implements. Horses and wagons were placed on deck, and other live stock was taken aboard. Twelve hundred people, it is said, left Buffalo every day for the west.

At first the boats went no farther west than what is now Toledo. After Ohio was well settled, the emigrants passed up the Maumee River from Toledo, across a twelve mile portage, and down the Wabash into Indiana. Those who stopped off at Cleveland followed the Cuyahoga River, crossing the portage to the Muskingum or Scioto rivers, which led to the Ohio and farther west.

Many of the newcomers journeyed on to Detroit, where they left the lake and either made homes in eastern Michigan or crossed over to the Kankakee River and floated down it into central Illinois. Several years later many of those landing at Detroit went overland and around the southern point of Lake Michigan to Fort Dearborn, which is now Chicago.

Pioneer Detroit. Travelers praised the comfortable homes of early Detroit, its blocks of brick buildings

and its fine courthouse; but they complained that the streets were not paved and that there were no sidewalks. The streets were mud to the knees in winter, while in summer they sent up clouds of blinding dust. However, this was true of all the frontier towns. The mud of winter led to a curious custom of making calls. A one-horse cart would back up against the door of a house while the ladies, wrapped in buffalo robes, clambered in and sat down on the bottom of the cart. In this manner they were carried from house to house on their visits.

The Black Hawk War. About this time, the Indians of Illinois under their chief, Black Hawk, made war on the whites (1832) and, for a while, frightened the coming settlers away from the prairies. The government, during this war, sent a vessel to Fort Dearborn with supplies for the army that was fighting Black Hawk. This was the beginning of steam navigation from Lake Erie around to Chicago.

Milwaukee. Many newcomers now sailed on to Lake Michigan harbors, where they landed, pushed overland, and founded the first settlements of white people in southern Wisconsin.

At all the good harbors, frontier towns appeared, one of which was Milwaukee. This city was built on a bold bluff from which there was a fine view of Lake Michigan. There was a narrow path winding along the lake shore at the foot of the bluff which afforded a favorite walk. The people enjoyed climbing the lighthouse, which was built after a few years, to watch the

steamers as they approached the city. The boats made a great curve to enter the harbor. They came and went every day, and their arrival brought the whole population of the town to the pier to welcome the newcomers or to send letters to friends.

Milwaukee was settled in 1835. The next year there was such a rush of newcomers that streets were laid out, a ferry set up, and sixty rude houses were built. By this time seven hundred people were gathered there. Ten years later a canal was built, called the Rock River Canal, connecting Milwaukee and the Rock River. When this was opened Milwaukee grew very rapidly on account of the trade brought to her markets by the canal and the boats on the lakes.

Early Wisconsin. Early settlers went to Wisconsin chiefly because of the lead mines in that section. We are told that fifteen million pounds of lead were taken from her mines annually. These mines were found chiefly in the southwest corner of the territory where there grew up several thriving towns, such as Dodgeville, Mineral Point, and Potosi. Wisconsin's lake shore also attracted many settlers. Racine and Southport, like Milwaukee, grew up quickly. From these ports, grain and lead were shipped eastward each year.

It was not long before people made their way into the heart of the forests and founded Madison, the capital city. This site was chosen before there were any people at Madison. A surveyor set out in the dead of winter and marked out the capitol park, with streets

running off from it in all directions, like spokes from the hub of a wheel.

The growth of Chicago. No sooner had the first steamboat landed at Fort Dearborn than the settlement began to have a wonderful growth. It had a splendid location at the limit of lake navigation and

CHICAGO IN 1834

in the midst of the richest farming region of the world. By the end of the year 1833 there were one hundred and sixty houses in Chicago. The four steamers that arrived that year started the city's commerce on the lake, and although the harbor was poor, it was later improved by Congress; and the second year two hun-

dred boats came, bringing hosts of emigrants. As they laid in supplies at Chicago for their prairie homes, a wonderful business sprang up there.

Land grew amazingly in price almost overnight. A certain Mr. Hubbard bought eighty acres of land east of the Chicago River for five thousand dollars. A few months later he had occasion to go to New York and found there much buying and selling of Chicago real estate. So he had a plot made of his eighty acres and sold half of his land in a little while for eighty thousand dollars. The price of Chicago lots rose to a hundred and even a thousand times what they had cost.

A Chicago paper said in 1835, "Almost all the vessels from the lower lakes are full of passengers, and our streets are thronged with wagons, loaded with household furniture and the implements necessary to farming. Foot passengers, too, with well-filled sacks on their shoulders, come in large numbers."

Off to the prairies. From Chicago, stage lines ran out carrying these newcomers in all directions. Many emigrants purchased their teams and wagons in Chicago, laid in a supply of provisions and tools, and started off to build a home on the prairie. The roads were muddy, especially in the spring, and the teams often stuck in the mire. They had a long wait sometimes until another traveler came along. By double teaming they pulled each other through the mud.

Yankee settlers. The emigrants using this northern route were largely from New England and New York,

so that northern Illinois, like northern Ohio and northern Indiana, filled up with Yankee pioneers. They differed from the southern pioneer, who came with only his rifle and hunting knife, because the Yankees brought their oxen and their farm tools and built permanent homes. With them also came merchants, schoolmasters, and preachers. The Yankees first seized upon the wooded valleys and later pushed out upon the open prairies, extending southward until they settled among the southern emigrants.

Questions and Problems

1. What effect had the steamboat on the settling of the west?
2. Locate the rivers mentioned in this chapter.
3. Locate the cities mentioned in this chapter.
4. Why was a settlement made at Milwaukee?
5. What advantage has a city that was first laid out by a surveyor over one that was not surveyed when it was founded?
6. Do you know any other cities besides Madison that were carefully planned?
7. What reasons can you give to explain why Chicago has become a great city?

Books to Read

Beard, C. A., and Bagley, W. C. — *The History of the American People* (Revised Edition), pp. 303–311; The Macmillan Company.

Nida, W. L. — *The Story of Illinois*, pp. 165–168; Farquhar and Albright.

CHAPTER XXV

THE OVERLAND JOURNEY

Emigrants going overland. It cost considerable, both in money and labor, to make a flatboat large enough to carry a family, their furniture, tools, and live stock down the Ohio. It took a good many dollars to pay the fares and freight on a lake boat. Therefore large numbers made the entire journey overland. For this purpose the oxcart was used. A yoke of oxen can draw a very heavy load, but they go at a snail's pace of one and one-half miles an hour. Farmers from Pennsylvania and Ohio made their way to the west after their crops were harvested in the autumn, when the roads were dry and hard.

Such large numbers went through Ohio cities in caravans that the newspapers often made mention of them, such as the following: "The last of this month quite a caravan of the hardy sons of Pennsylvania passed through this city on their way to Stephenson County, Illinois. There were fourteen wagons and sixty-one persons." One man, who was traveling through Indiana toward Vincennes, counted one hundred emigrant wagons in fifty-five miles.

Some even traveled on foot. "Sometimes the light wagons containing the possessions of the movers were

drawn by the people themselves. The head of the family was seen between the shafts of the wagon, harnessed with a collar and traces, while the rest of the family, according to their strength, pulled with ropes attached to various parts of the vehicle. Below the axle dangled pots and kettles of all sizes and forms. To a Yankee mover a plow, a bed, a barrel of salted meat, a supply of tea and molasses, a Bible, and a wife were the indispensable articles." [1]

The children's work. It was usually the duty of the older sons or daughters to ride on horseback and drive the cows, sheep, and hogs. "To start off with a mixed drove of animals was no trifling affair, for though they would drive pretty well after getting used to the road, their obstinacy and contrariety at first were surprising, and a boy to each animal was little enough. First a pig would dart back and run like a deer till he was headed and turned, by which time the others would meet him and all have to be driven up; in the meantime a cow would be sailing down a by-lane with elevated head and tail, and a breathless boy circling through the field or woods to intercept her career; and then the sheep would start over a broken piece of fence, the last following the first, leaping higher over every obstacle till they were chased back to the road." [1]

Sometimes the horses would escape during the night and make off along the road toward their old home, leaving the family in great despair. On one occasion

[1] W. D. Howell's *Stories of Ohio.*

five horses got out and traveled back twenty-two miles, where they were checked by a tavern keeper until the men in pursuit came up.

Bad roads. At some seasons the roads were impassable, especially after rains; and as the wagons were not very strong, there was frequently a breakdown in the middle of a mudhole. Sometimes the coupling pin or iron bolt, which held the wagon together, would break and the wagon would be pulled apart in the midst of the mud. Perhaps the travelers might have to go miles to a blacksmith to obtain a new bolt. Many of the streams were not bridged, and the movers forded in great danger and excitement. In crossing the larger streams they were carried on rude ferries. Often a family would be on the road for four or five weeks, a weary journey, especially for the children.

Camping overnight. In very hot weather, the caravans traveled at night and rested by day in the cool shade where wood and water were plentiful. When they halted, the fire was started and the cooking utensils brought out. While the meal was being prepared, the men unharnessed the tired horses and put them out to graze in the woods or open lands, while the children skipped about exploring the new surroundings. Beds were made up in the wagons, and frequently, in good weather, upon the ground. In the morning there were much stir and bustle to get off. The stock was rounded up and driven on ahead. After breakfast, camp was broken and all were again moving westward. Fifteen miles a day with an ox team was a good day's

journey, and on many days they could accomplish no more than six or eight miles.

Attractions of the west. The soldiers who were sent to the prairies to fight against Black Hawk and his dusky tribe returned to their homes in the east with great praise of the western country. Land companies were formed in many cities of the east, pointing out the golden opportunities in the Mississippi Valley. Many enticing things which they said about the country were not true; but the people believed them, and the western land craze spread over the east.

Those who came first were well pleased and wrote back to their friends painting the prairie life in bright colors. Some rough characters came for the mere sake of adventure; they loved the excitement and dangers of frontier life. But most of those who came sought a new country where they would have a better chance to get on in the world and make their fortune. Perhaps the chief attraction was cheap land. Farms in the east had risen in price beyond the reach of the poor, while the fine lands of the west could be had for a dollar and a quarter an acre. Grain was raised in great abundance in the west, and was now being shipped to the east, where it could be sold cheaper than the eastern farmer could raise it on his hillside farm. This led many Yankee farmers to sell out and make their way toward the setting sun. Then, also, there were frequent crop failures in New England, which drove many to seek new homes. Still another cause of this westward rush was the panic of 1837, which caused

shops and factories in the eastern cities to shut down, throwing thousands out of work. These idle and hungry classes moved westward, where there were better opportunities.

Questions and Problems

1. Why did some pioneers prefer to make the journey to the frontier by land rather than by water?
2. What were some of the articles taken along?
3. Pretend that you made this overland trip. Describe your experiences.
4. How did the camp equipment of those days differ from what we might have to-day?
5. Give reasons why people were moving westward.

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 134–146; Ginn and Company.

Nida, W. L. — *The Story of Illinois*, pp. 154–164; Farquhar and Albright.

Nida, S. H. — *Polly the Pioneer;* The Macmillan Company.

CHAPTER XXVI

YANKEE FARMERS ON THE PRAIRIES

Settling the prairies. The open prairies were very different from the hillside farms of the east, and there were some hard problems for the prairie pioneer to solve. He must first build a house for his family. If his prairie farm was not too far from timber he might, if he had the money, buy logs to build a cabin. But if he had settled twenty or thirty miles from woodlands, he had to be contented for a while with a clay or sod house.

A sod hut. A sod hut was built of grass sods or turf, cut in strips about two feet long, eighteen inches wide, and four inches thick. These were laid upon one another as bricks are laid nowadays. They were held firm by wooden pegs driven through two or more layers. To roof the earth cabin, thatch or straw was most frequently used. Shingles had to be hauled with ox teams from Chicago, St. Louis, or some other growing city, perhaps fifty or one hundred miles away. Very few could afford a roof of shingles or a wooden or log cabin.

After some years a thrifty Yankee introduced a sawmill, which at once lowered the cost of lumber. This venture proved so profitable and lumber was in such

great demand, that scores of sawmills were quickly set up in the timber belt. The trees were sliced up rapidly, and the mud cabins soon disappeared and comfortable frame houses took their places.

Plowing prairie sod. The next hard problem for the prairie farmer was how to get his field ready for planting a crop. He did not have to clear his ground of trees, as did the woodland farmer, but it was a difficult job to cut the sod of the prairie with a plow. It was as tough as leather, and neither a single team of horses nor one yoke of oxen could turn it over with a plowshare.

The farmers tried different ways of plowing. At last, ox teams to the number of three, four, five, or six yokes were hitched to a pair of cart wheels. Behind these was fastened a plow, with a beam fourteen feet long, and a share which weighed anywhere from sixty to one hundred and twenty-five pounds. This plow cut a furrow from sixteen to thirty inches wide but only a few inches deep. To turn only a thin slice of sod proved best for the first plowing, because it exposed the roots to the hot sun, which soon killed the prairie grass. The cost of this first plowing was greater than that of the land itself. However, the first season brought a fair corn crop, and in a few years the rich black soil was yielding fine harvests.

Prairie fences. Now the farmer had to protect his crop from the live stock which were wandering about in the fields, so he needed fences. Along the wooded valleys, it was a simple problem to build a fence, for plenty of rails could be split out of trees. But where

a man lived far from timber, this could not be done. These Yankee farmers knew well how to build a fence out of stones as they had done in the east, but here on the prairie there were no stones. Sod fences were tried

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OLD RAIL FENCES ARE STILL TO BE FOUND IN THE COUNTRY

first, but, unless they were made higher by a rail or board along the top, cows and pigs climbed over them into the cornfield. Hedge fences were planted, but they would not keep out the hogs; besides, weeds and grass grew in them and these helped to spread dangerous prairie fires.

Some farmers, after finding that board and picket fences were too expensive, followed the plan of fencing in only enough land for the cattle, hogs, and sheep; and raised their crops on the open prairie without any protection whatever. During the day it was the work of the boys to keep stray cattle away from the crop, but at night it was left unprotected. This difficulty of finding a proper fence for the prairie farmer was not met until wire came into use for this purpose.

It was impossible to protect the crop by means of fences against gophers and prairie chickens, which often dug up two or three plantings of corn. Gopher hunts were organized to kill off these pests. Prairie wolves were still more troublesome. They would make way with pigs and lambs and rob chicken coops. It was a regular sport on holidays to organize a hunt to run them down.

Fine crops. Before many years passed by, fine crops were growing on ten thousand farms. The farmer's corncribs were bulging out and his wheat and oat bins were full to the top. His cattle and horses were sleek and fat, but still he was not getting on well. He was raising much more grain and stock than his family could use, but he had no market where he could sell his surplus and buy the things he could not make. Many farmers tried feeding corn to cattle because these animals could walk a long distance to market. However, such great quantities of grain were raised that some of it had to be shipped to cities on the coast to find a market. Those who happened to live near navi-

gable rivers such as the Miami, the Wabash, the Illinois, or the Ohio, could ship their produce by water, by way of New Orleans and the Atlantic, to eastern cities. This was a long and a dangerous voyage. In spite of this and the often long and tiresome journey to the river, the prairie farmer found it more profitable to sell his produce to a steamer at the river landing than to allow it to spoil in his crib.

Questions and Problems

1. If you live in the country, make a sod hut.
2. Which would you prefer to settle in, woodland or open prairie? Give reasons for your answer.
3. What solved the prairie farmer's problem as to fencing his crop?
4. How and where did these farmers dispose of their crops?
5. Which would you prefer to live in, a sod house or a log cabin? Why?

Books to Read

Nida, W. L. — *The Story of Illinois*, pp. 169–173; Farquhar and Albright.

Nida, S. H. — *Polly the Pioneer;* The Macmillan Company.

CHAPTER XXVII

WESTERN ROADS

The National Road. When Ohio was admitted as a state in 1803, Congress promised to use part of the money received from the sale of public lands to build a hard wagon road across the Alleghenies. Since there was already a good road as far west as Fort Cumberland, this road was to begin at Cumberland and extend seven hundred miles to the Mississippi River. The National Road was begun in 1811 and was built through the mountains, but it was not continued to the Mississippi until some years later.

Travel on the pike. On this thoroughfare, passenger coaches were soon moving along at the rate of ten miles an hour and sometimes faster. Canvas-covered freight wagons were also seen carrying many tons. They had wheels in the rear which were ten feet high and the wagons were drawn by twelve horses. Life along the National Pike was full of interest. A toll, or tax, was charged for all the animals and wagons that passed along it. The toll was higher for hogs than for sheep, and still more was charged for cattle. If a wagon had a very wide tire, no toll was demanded. The toll was a sort of tax for the use of the road, and many people tried to avoid paying it. Drivers sometimes lied about the number of passengers in their stages.

Stage companies. The stages were owned by companies, some of which had very queer names. One line of stages was called the "Pioneer," another the "Junebug," another the "Defiance." The stages moved rapidly, caring little for dust or mud, for horses or men, as each wished the credit of making the best time. Sometimes as many as twenty coaches followed one another in a close line. Along this highway were hotels and tollhouses.

The only good road. By 1840, the Cumberland or National Road had been extended at a cost of seven million dollars through Columbus, Indianapolis, and Vandalia to St. Louis. It enabled people to travel overland easily between the Mississippi and the Atlantic seaboard. Traffic on this road became very heavy in both directions. Emigrants from Pennsylvania, Ohio, and the east flocked westward over this route. Buyers of live stock gathered up sheep, cattle, and hogs from the western farms and drove them along the pike to the eastern market. It was, however, out of the question for farmers to haul their wheat and oats a thousand miles to Baltimore, even over this good road.

This pike profited only those who lived near it. Farmers who had settled about Lake Michigan, Lake Huron, or Lake Erie, found a ready market at the lake ports. Here their stock was slaughtered and their meat and grain was shipped east by way of the Great Lakes and the Erie Canal.

Other highways. A farmer who had settled far inland found no ready market nearer than fifty or one

hundred miles. He must haul his grain to the nearest lake or river port, and there exchange it for the things he needed most. Once or twice a year he set out on this long trip. Sometimes farmers clubbed together and loaded two or three wagons. They hitched two or three yokes of oxen to each, and made their way slowly across the country. The trip took two weeks or more. Their wheat was not put into bags but shoveled into a wagon box which was lined with a cotton sheet. It was not uncommon to see one hundred such wagons a day on some of the roads leading to the lake ports.

These roads were poor and muddy much of the year, and there were but few bridges. Streams were crossed by fording or by rude ferries. There was no attempt to grade or drain the crossroads. When rains fell in summer, and especially when the frozen ground thawed in the spring, they became almost bottomless.

Corduroy roads. In time the pioneers undertook to improve the leading highways. The worst roads were made passable by logs laid side by side close together across the way. These were called corduroy roads. Such log or plank highways were not very satisfactory because they needed repairs continually. After a time gravel and pike roads came into favor.

Questions and Problems

1. Locate on a map cities through which the National Road ran.
2. How do you suppose the stage owners felt toward the railroads?

3. Write three other questions on this chapter, to be answered in class.

Books to Read

Earle, A. M. — *Stage Coach and Tavern Days*, pp. 223–240; The Macmillan Company.

Faris, J. T. — *Real Stories from Our History*, pp. 161–168; Ginn and Company.

Sparks, E. E. — *The Expansion of the American People*, pp. 259–264; Scott, Foresman and Company.

CHAPTER XXVIII

EARLY RAILROADS

Better transportation. In 1826, the Erie Canal had just been completed, and everybody was looking to canals for better transportation. Philip Evans Thomas was at that time a director in the Maryland Canal Company. He had seen the use of railroads in England, where the cars were drawn by horses, and realized that railroads could go where canals could not. They would provide a way of climbing over the mountains to the west. He was eager for better transportation in America, and he gave up his office as director for the canal to organize a railroad company which was to build a railway across the Appalachians from Baltimore to the Mississippi. The people of New York made a loud outcry against the idea of a railroad to the west, fearing it would take much trade away from the Erie Canal. Nevertheless, the Baltimore and Ohio Company was organized in 1827, and many men with money were eager to buy stock in this company. They figured that trains running four miles an hour, which was fair speed for the early horse-drawn trains, could go from Baltimore to the Ohio in sixty-two hours. The people of those days soon found that the commerce of both canals and rivers was hindered for several months each year by ice, while in the dry weather

of summer the low water in some of the rivers stopped commerce by boat. For these reasons railroads would be more desirable. Perishable food such as oysters might be carried fresh by rail from Baltimore to those living far from the Atlantic.

The Baltimore and Ohio Railroad. On July 4, 1828, the City of Baltimore celebrated the beginning of work on the Baltimore and Ohio Railroad. Charles Carroll, the only survivor of those who had signed the Declaration of Independence, was a guest in Baltimore on that day; and it was he who was given the honor of turning the first spadeful of earth.

The work was pushed rapidly, and by 1833 the tracks reached Harpers Ferry, but it was twenty years before the first train rolled into Wheeling. It had been a long hard struggle to cross the mountains. It was now proposed to extend the road to Cincinnati and even farther west.

The early railroad. The early railroad was rudely built. Long slabs of stone or "stone rails" were first laid and on these the iron rails were placed and riveted down. At first the railway coaches had no springs, and passengers were jolted along as if on a farm wagon. Before the steam locomotive was perfected horses were used to draw the cars. Sails were even tried for propelling the cars, by rigging them up like a ship. In 1829, Peter Cooper built a steam locomotive called "Tom Thumb" which won a race with a horse car. After this, steam locomotives quickly took the place of horses in drawing railroad cars.

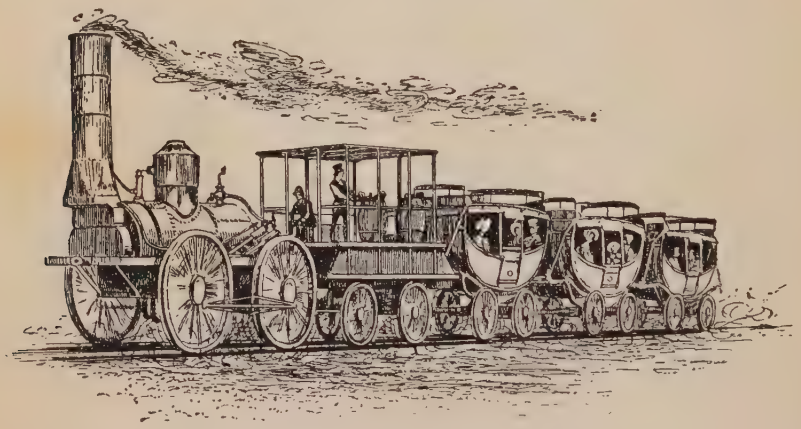
Railroads in the east were first built in short stretches. Each section of road belonged to a different company, and when a traveler passed through the country, he kept changing from one railroad to another. If a traveler left Washington to journey by rail to New York, in the early days, he had to alight at the station in Baltimore, claim his baggage, and hire a porter to carry it to another depot, while he

A HORSE CAR AND PETER COOPER'S ENGINE

took a hack or omnibus. At this depot he bought a ticket to Philadelphia, where again he had to look up his baggage in the mass of trunks and have it carried to another depot. Here again he purchased a ticket and checked his trunk to New York. Now one may go from New York to San Francisco, a distance of several thousand miles, with but one change, and the baggage may be checked through to the destination.

The railroad craze. By 1849 there was a mania for building railroads all over the country. There were soon ten thousand miles of railroads in the United

States. Cities, towns, and counties were eager to subscribe to the stock of railroads that were to be built. Conventions were called to stir up the people to favor new routes of trade. In 1850, a railroad was planned from Niagara Falls to Detroit. In the same year, the Pennsylvania Railroad, which was being built from



A LATER RAILROAD TRAIN WITH COACHES

Harrisburg to Pittsburgh, ran its first train from Philadelphia westward.

From Albany to Erie. In 1853, it was necessary to use nine separate roads in going from Albany to Buffalo. Between Buffalo and Erie, many changes had to be made, because each road used a separate gauge or width of track. The road that ran from Buffalo to the state line at Erie was six feet wide and the road from Erie to the Ohio line was four feet ten inches wide. After some years all these short roads were bought by

one company, and the tracks were to be made the same width, so that trains might run through without change.

The people of Erie fought this change bitterly. If all goods by train, both freight and passengers, had to be unloaded at Erie and loaded again on the other road, it made good business for the city. Passengers got their meals there, and many stayed overnight. The people saw that if the trains could pass through without this change the merchants at Erie would lose trade. So when one company bought all these short roads and undertook to run through trains, the people of Erie gathered together in a mass meeting to protest against it.

As soon as the company started to change the gauge, the news was carried to Erie, where a cannon was fired and bells were rung. The mayor called out the special police, and the hook and ladder company in full uniform. These, with the crowds of angry citizens, tore up the tracks of the railroads in the streets, and destroyed bridges crossing two streets. The railroad company went to court to force the people of Erie to cease destroying their property.

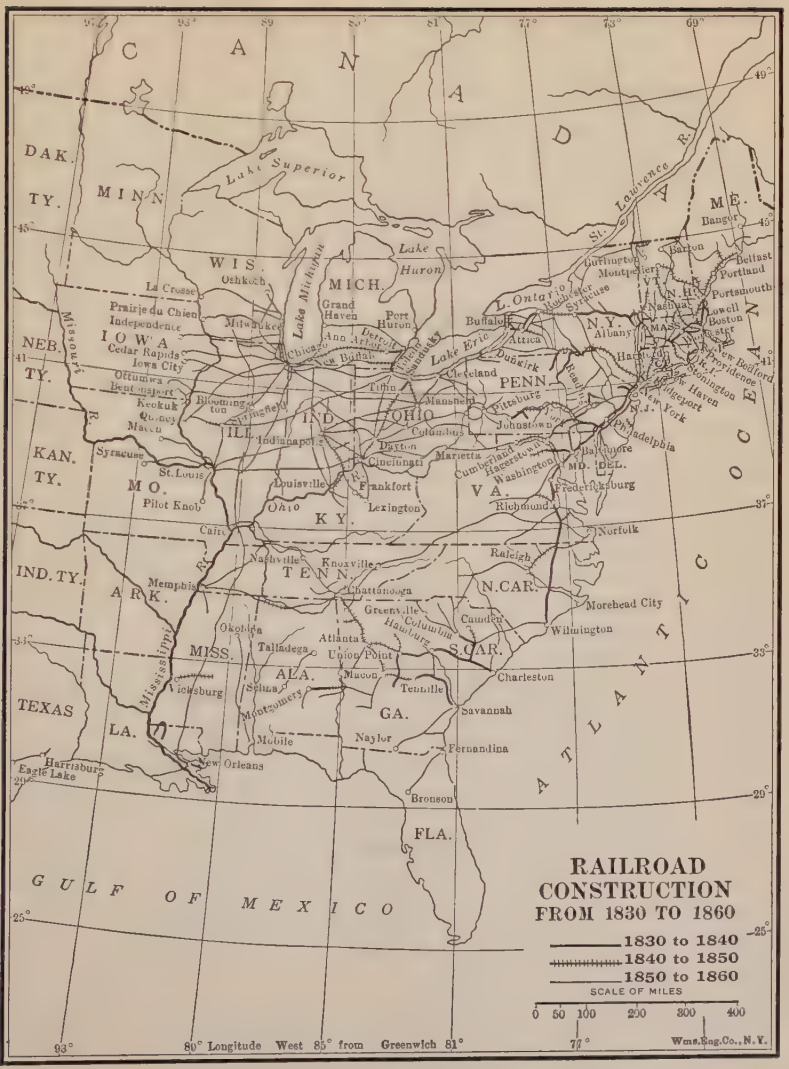
The company rebuilt one of the bridges, but no sooner was the work done than it was burned a second time. Another bridge was built, and again the people burned it. The company undertook to relay the tracks, but the mayor and the people tore them up. Then some of the offenders were put in jail, and a marshal was sent to take possession of the road. But

the mayor sent his policemen to arrest the marshal and fifty laborers for "obstructing the streets."

All this while passengers, mails, and baggage had to be carried from one side of the city to the other by stages, sleighs, and wagons, which cost the railroad many thousands of dollars. Horace Greeley, who passed through Erie at this time, said that he was forced to ride from Harbor Creek to Erie in an open sleigh through wind, snow, and sleet. "Let Erie have her way," he said, "and all passengers must change cars before her pie shops."

Railroads in the middle west. At last a railroad was built as far west as Cleveland. Here the passenger took a steamboat to Toledo, whence he went to Detroit by rail. By 1853 there was a continuous railroad from New York to Chicago. It was not long before there were ten different railroads entering Chicago, and each day seventy-four trains of cars came in. The eastern part of the United States was now being rapidly connected with the middle west by numerous railroads.

Railroads in the west. In the western states also, there was a great desire for railroads. Missouri wished to connect St. Louis with the Pacific by building across the plains to San Francisco. Uncle Sam offered to grant immense tracts of land along the way to aid the railroad companies in building such a road. To the state of Illinois the government ceded large tracts to encourage the building of the Illinois Central Railroad, which was to reach from Chicago to Cairo, and also from Chicago west to Galena.



MAP OF EARLY RAILROADS

Transportation in the south. About this time the southern states became interested in railroads. They received grants along a line which was to join Memphis with the mouth of the Ohio. For these millions of acres given away to encourage railroad building, the government asked little benefit in return, except that United Statest troops were to be carried on the roads without cost.

The Galena and Chicago Railroad. There are many interesting railroads leading westward from Chicago, but the earliest was the Galena and Chicago Railroad, now called the Chicago and Northwestern. A short ten miles of this road were built in 1848. In that year a lake steamboat brought the first locomotive to Chicago, because the railroad from the east had not yet reached this city. This curious little iron horse, called the "Pioneer," started on its first trip on these few miles of track in November of that year. It had on board only the directors of the road and a few newspaper men, and while the journey extended scarcely beyond what is now Chicago's city limits, it was one of the greatest events that had ever occurred in Chicago. On its return to the lake front, a farmer hauling a load of wheat flagged the little train and transferred his wheat to be drawn by the iron horse. This was the first shipment of grain ever received by rail in Chicago, now the greatest grain market and railroad center in the world.

Great American desert. At this time our great central valley, as far as the Mississippi, was settled only

by scattered cabins, and therefore the railroad was built only to Galena, situated in Illinois not far from the Mississippi River. The wide expanse of plains west of this river to the Rockies was occupied by trappers, Indians, and buffaloes. Because there was less rainfall here than farther east, it was called the Great American desert. It was believed to be useless for agricultural purposes, though it is now a wonderful granary with millions of prosperous farmers. When pioneer homesteaders crossed the Mississippi and began to build their cabins on the edge of this Great American desert, it began to recede immediately and has continued to recede to this day. The railroads were the chief factor in doing away with the Great American desert, for they opened the west and bound it by iron ties to the east.

At first the people feared it would never pay to build a railroad as far as the Mississippi because there were so few people and so little traffic in that section. The directors of the company planned to change the line into a wagon road if it failed as a railroad. West of the "Father of Waters" were hundreds of Indian braves who defied the iron horse. They coveted nothing so much as the scalp of a railroad engineer. But the engineers presently chased the red men into the Rockies and even here found mountain passes for the railroads which were soon to cross the continent.

Chicago and Northwestern Railroad. The Chicago and Northwestern Railroad kept pushing gradually into the wild west until, in 1855, it crossed the Missis-

sippi and reached Cedar Rapids. In a few years, its locomotives steamed into Marshalltown and Boone, and at length, in 1867, into Council Bluffs on the Missouri River. Here it connected with the Union Pacific, which was then building to the Pacific.

Questions and Problems

1. What advantages has transportation by means of railroads over that by means of rivers and canals?
2. Compare railroads with lake steamers.
3. What was the objection to short railroads?
4. What would you have said about the trouble at Erie if you had owned a hotel there?
5. How did Uncle Sam aid the railroads?
6. What effect did the railroads have on the settling of the west?

Books to Read

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PART THREE

WINNING THE FAR WEST

CHAPTER XXIX

THE LOUISIANA COUNTRY

The overland haul. The Cumberland or National Road brought eastern cities into easy contact with Wheeling and Pittsburgh and other cities west of the Alleghenies, but it still cost enormously to haul goods over this long road. The freight on a single ton of goods carried by wagon from Philadelphia to Pittsburgh was one hundred and twenty-five dollars. It cost five dollars to haul one hundred pounds of sugar three hundred miles by wagon. Thus you can see that the charge for carrying freight over the Alleghenies was often more than the cost of the goods themselves. This is the reason why nearly all the early western trade was through New Orleans.

The wharves of New Orleans were lined with hundreds of flatboats unloading wheat, flour, pork, and live stock, gathered from the river valleys north. The city was enjoying a rich commerce and her population was growing.

The Spaniards at New Orleans. New Orleans, for nearly twenty years after the Revolution, belonged to the Spaniards. They controlled the territory on both sides of the lower Mississippi, and it was only with their permission that boats carried goods to New

Orleans and out into the Atlantic. For a time, the Spaniards were friendly to us and allowed western boats to come to New Orleans by paying a small tax. Then they forbade this trade altogether and captured our boats. Whereupon there was loud complaint heard among the farmers of Kentucky and Tennessee, who demanded that Uncle Sam take steps to open the lower Mississippi for their trade. They even threatened to go themselves and take New Orleans from the Spaniards. They finally declared they would secede from the Union if the government did not aid them.

France gets Louisiana. About the year 1800, the Spaniards ceded Louisiana to France. Now Louisiana included not only the land about New Orleans and a strip along the east shores of the river, but all the territory on the west bank of the Mississippi westward to the Rocky Mountains from Canada to Texas. At this time France was ruled by Napoleon, one of the greatest warriors of all time. When our people heard that the lower Mississippi and all the Louisiana country had passed into Napoleon's hands there was a great outcry of fear that Napoleon might close up the Mississippi to our trade or, what was worse, build up a great and dangerous empire on our western borders.

The Louisiana Purchase. Our minister at Paris, Robert Livingston, was instructed to discuss the Louisiana question with Napoleon and to suggest our purchase of part of the territory. He told Napoleon that our president, Thomas Jefferson, said that whoever held New Orleans was a natural enemy of the

United States, and the time might come when the United States would have to fight for it.

At that time Napoleon was at war with England. "What will you do with Louisiana?" said Livingston to Napoleon. "Would you have England wrest it from you? Her ships have driven yours from the seas. What would you think if the United States joined with England against you? England would gladly give us Louisiana in return for our help."

THE LOUISIANA PURCHASE

Napoleon saw that no one could hold the mouth of the Mississippi and still have lasting peace with the United States. Moreover, he needed money to carry through his great war. So he said, "I will not keep a territory which would cause trouble with the Americans and produce a coldness between us. I will sell it to the United States, and in this way I will gain their friendship, and I will also make them so strong that some day they will be able to bring England to her knees."

President Jefferson had hoped to buy only a small territory about New Orleans in order that we might have an outlet through the Mississippi for our trade, but to his great amazement Napoleon offered to sell the

whole of the Louisiana territory. This territory was larger than all of the United States east of the Mississippi. It was the largest piece of land ever sold. The United States gladly accepted Napoleon's offer and bought this immense territory for fifteen million dollars.

In this way our country was doubled in size, and Uncle Sam extended his possessions from the Mississippi to the Rockies. This territory has since been made into nearly a dozen states. The purchase of Louisiana was one of the most important events in United States history.

Questions and Problems

1. Why was it unsatisfactory to have New Orleans in the hands of Spain?
2. Who objected to the Spanish control of the lower Mississippi?
3. Why did Napoleon agree to sell Louisiana to us?
4. Point out on a map the Louisiana Territory.
5. Why was the purchase of the Louisiana Territory a lucky deal for the United States?

Books to Read

Beard, C. A., and Bagley, W. C. — *The History of the American People* (Revised Edition), pp. 207–213; The Macmillan Company.

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CHAPTER XXX

THE LEWIS AND CLARK EXPEDITION

Exploring the west. For several years, Thomas Jefferson had wished to send an exploring party through the west, from the Mississippi River to the Pacific Ocean. So when the Louisiana Territory was purchased, in 1803, President Jefferson set to work to carry out his scheme. He chose Meriwether Lewis to lead the expedition and told him to provide himself with arms and ammunition, with tents, boats, provisions, and medicines. He also directed him to take many articles for presents, and for trade with the Indians. Lewis chose Captain William Clark, a brother of George Rogers Clark, of the United States army, as his assistant.

In July, 1803, Lewis and Clark proceeded to Pittsburgh, where their outfit was to be provided. From here they went down the Ohio and up the Mississippi to the mouth of the Missouri. They encamped on the Illinois side of the river and spent the winter learning from trappers and traders all that they could about the western country, and drilling their men as soldiers. They made ready to ascend the Missouri River early in the following spring.

Up the Missouri. The party was composed of twenty-eight men, half of whom were soldiers. There

were also nine young Kentuckians and two Frenchmen, one a hunter and one an interpreter. Captain Clark was accompanied by a negro servant. In May, 1804, the party set forth in three boats, and pushed up the Missouri at the rate of about twelve or fifteen miles a day. After a journey of eight days they came across Indians and made their first trade—two quarts of liquor for four fine deer. Farther on they passed the cabin of Daniel Boone, who had settled on the Missouri frontier. As there was plenty of game in the forests, and the rivers were alive with fish, they had little trouble in obtaining food.

The Indians at Council Bluffs. By the time they had been some weeks on their journey, they had met many Indian tribes and usually found them friendly. In early June they passed the mouth of the Kansas River, where they saw an abundance of goats, wild turkey, and antelopes. A month later they reached the mouth of the Platte. At both of these places they met parties of fur traders coming from the west with loads of beaver skins. One day they suddenly came upon three Indians who were dressing an elk, and it was decided to hold a council with their tribe. Runners were sent out to invite the red men to the meeting. Flour, meal, and pork were sent to the Indians to prove the good will of the white men.

They chose a bluff on the east bank of the Missouri, where the party pitched their tents and awaited the approach of the Indians. The view from this bluff was a magnificent one; it stretched along the winding

river and over the prairie dotted with groves of cottonwoods and elms. The place was called Council Bluffs, and here we find to-day a flourishing city and a railway center. The Indian chiefs who came thither to confer with the white men were presented with medals and

THE REGIONS EXPLORED BY LEWIS AND CLARK AND BY ZEBULON PIKE

other trinkets. They were greatly pleased with the strange palefaces from the east.

Still pushing up the Missouri. The explorers then pushed on up the Missouri and encamped, a few weeks later, at the mouth of a little river where Sioux City, Iowa, is now located. One of their party, Mr. Floyd, had died, so they named the river after him. Fishing was good; a single haul of their drag made of willow twigs landed three hundred fish. Having gone some miles farther up the Missouri, they came upon members

of the Sioux tribe, with whom they held councils. The Indians were friendly, offering to carry the white men on buffalo skins and feasting them on dog meat. They made friends with many other tribes, always exchanging presents. One of the tribes they met refused to accept liquor. "Why should we be offered a drink which makes fools of us?" they asked. Most of the Indians, however, were very eager for the "fire water" of the white men.

Through the Dakotas. As they moved on up the river through the Dakota country into the far northwest, the weather grew colder, so they decided to camp for the winter. They had traveled sixteen hundred miles since they left the mouth of the Missouri. Having constructed several strong log houses, the blacksmith of the party built a furnace and made knife blades, arrow heads, tomahawks, and spear points which were exchanged with the Indians for corn. The Indians gathered about the blacksmith at his forge and greatly admired the marvelous bellows. Buffalo meat was dried and stored for the winter and there was also the flesh of deer, of elk, and of beaver to be had. Clark went hunting alone one day and killed seven buffalo. Thus the winter was spent with reasonable comfort. The men enjoyed sharing in the games and sports of the Indians. They inquired about the western wilderness of all whom they met.

Pushing on at the first signs of spring, the party went farther into the wilderness. When the current of the river became too rapid for the large boat some of the

party turned back with it and steered for St. Louis. They carried with them boxes containing specimens of rocks and minerals, stuffed birds, and animals, which Lewis and Clark were sending to President Jefferson.

On to the Rockies. In the two smaller boats the remaining members of the expedition journeyed on toward the Rocky Mountains. They had now spent a year in the wilderness, but they were still far from the Pacific Ocean. They passed the mouth of the Yellowstone River, and came to another stream whose water was strangely white, and which they called the Milk River. As they traveled they found many wild animals. There were great herds of buffalo, many wolves, bears, coyotes, prairie dogs, and other animals. In the mountains they met with the ferocious grizzly bear, the terror of the Rockies. One day Captain Lewis was chased by a wounded bear and narrowly escaped with his life. Another morning when he awoke he found a huge rattlesnake had coiled itself around a tree beneath which he had slept, but had done him no harm.

The top of the Rockies. Farther on, Lewis climbed a hill and gazing far to the westward he beheld, for the first time, the crest of the Rocky Mountains, yet many miles away. The lofty summits were snow-capped and reached into the very heavens. The magnificent scene impressed him deeply. On one occasion as the party were walking over the plain, they heard a terrible rumbling in the distance. They did not know what it meant, until they were shortly overtaken by a

terrific hailstorm, from which they suffered severely, being knocked about and much bruised.

The Great Falls. On June 13, they reached the Great Falls of the Missouri River, whose mighty roar they had heard for many miles. They marveled at the sight of one of the grandest waterfalls in the

A HYDROELECTRIC PLANT AT GREAT FALLS, MONTANA

world. In the course of sixteen miles the river fell from the mountain side three hundred and sixty feet, leaping over four different cataracts, the highest being eighty-seven feet high. Above the spray and floating mist of the cataracts, they saw a beautiful rainbow which floated over it and encircled the mountains.

The "Gates of the Rockies." When the party reached the Great Falls of the Missouri they were obliged to carry their canoes around it for a distance of eighteen miles before they could reëmbark in the smooth waters above. Beyond the Falls, they paddled for one hundred and forty-five miles until they came to a great gap, or break, through the mountain walls, which were many hundred feet high. Through this gap the Missouri flows. They called it "The Gates of the Rocky Mountains." There was still ahead of them a journey of four hundred miles before they would reach the source of the Missouri.

At one place among the Rockies the party separated into two divisions and came near losing each other because of an impudent little beaver. When the party led by Captain Lewis reached the forks of a small river, they placed a letter on a pole with directions for Clark when he came up. The letter told him to follow the stream to the left. Then Mr. Beaver came along and deliberately cut down the pole with his teeth and carried it away, letter and all. Clark arrived at this point and, finding no directions, took the wrong route; and it was several days before the parties found each other.

More Indians. Sometimes the explorers came in sight of a few savages, but when they undertook to approach them, the red men fled to the forest, running like frightened deer. On one occasion they came suddenly upon two Indian women, one of whom took flight. The other was captured. She stood still, ex-

pecting to be killed instantly, but Lewis convinced her that she had nothing to fear. Needing a guide he persuaded her to lead them to her tribe. While on the way they were met by sixty armed warriors who were coming to rescue her. When they beheld the woman whom they thought had been stolen from them coming back safely, they were filled with joy. Leaping from their horses they embraced the white men, besmearing their clothes and faces with Indian paint and grease. From this time on the explorers had no trouble in securing guides and horses.

The watershed. Our heroes at last reached the backbone or watershed which divides the vast basin of the Mississippi Valley from the Pacific slope. At this point one might pour out a jug of water and part of it would flow eastward, by way of the Missouri and the Mississippi rivers to the Gulf, while another part, striking a gentle slope as it fell, would soon merge itself into the waters of the Snake River and thence through the Columbia River enter into the Pacific. Here stood the explorers upon the great divide, the birthplace of many rivers. From this point onward their canoes would be useless, as they would need to thread their way through the rugged mountains on horseback and on foot until they came to the navigable waters of the Columbia. So here they left their boats.

Splendid scenery. They passed on, meeting with dangerous rapids upon the upper waters of the Columbia and suffering great hardships. Boats could not be used on these mad waters, as the river raged through

deep and dangerous canyons. They traveled among scenes of wonderful beauty. They saw magnificent cascades and snow-capped mountains, skirted below with gigantic forests. The way had to be explored slowly, for the canyons were almost impassable.

Pacific Ocean. At last the river became navigable, and they built five canoes and embarked, leaving their horses with some Indians. They passed down the Snake River to the Columbia, whose mouth Captain Gray had discovered many years before, and followed it until they looked out upon the Pacific Ocean.

They had journeyed for a year and a half through the unbroken wilderness, and were overjoyed at the success of their long journey. They built a log cabin near the mouth of a river, calling the place Fort Clatsop. This was their home for the following winter. From this point they made several expeditions, and many tribes of red men came to visit them.

Homeward bound. They started on their homeward journey in March, 1806, passing up the Columbia and Snake rivers in canoes to the headwaters. Here they secured horses from the Indians, whom they had seen the year before on their journey westward. One of the most friendly tribes was the Walla Wallas. Some were suspicious and unfriendly. Upon one occasion Lewis was compelled to shoot an Indian to save his own life.

They crossed the mountains on horseback. A well-beaten trail led them through the Rockies. It was a

path taken by the western Indians coming east to hunt buffalo on the plains. They made better time on their return trip, especially after they reached the Missouri. On this river they floated eastward very happily, reaching St. Louis in September, 1807. They had journeyed through the unexplored wilderness for two years and a half, and had traveled nine thousand miles. There had been but few accidents and only one life had been lost.

The reward. Congress gave grants of land to each member of the party. Captain Lewis was appointed Governor of Louisiana Territory and Clark became a General of Militia and, later, Governor of Missouri. Two years afterwards Lewis became hopelessly ill, and in a moment of insanity took his own life. But Yorke, Clark's negro servant, was unwilling to have Captain Lewis's name disappear, so he called himself Captain Lewis to the end of his long life.

Lewis and Clark's expedition gave the United States a claim to the Oregon country, which England also wanted very much. Stories of the journey were soon published in the Atlantic States, and people took a lively interest in this far western wilderness. The hunter and trapper followed the path blazed by the explorers, and in a few years trading posts began to appear along the route. Companies were formed for fur trading in the Oregon country. Settlers pushed deeper and deeper into the region beyond the Mississippi, and at last settler-emigrants crossed the Rocky Mountains.

Questions and Problems

1. What do you think of the plans for the Lewis and Clark expedition?
2. Why were not horses taken on this expedition?
3. Why was it desirable to call a council with the Indians?
4. What is a watershed?
5. What assistance did Lewis and Clark receive from the Indians?
6. Do you think this expedition was worth while? Why or why not?
7. Trace on a map the journey that was taken.

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Laut, A. C. — *Pathfinders of the West*, pp. 307–333; The Macmillan Company.

McMurry, C. A. — *Pioneers of the Rocky Mountains*, pp. 1–39; The Macmillan Company.

Tappan, E. M. — *American Hero Stories*, pp. 207–217; Houghton Mifflin Company.

Roosevelt, T. — *Stories of the Great West*, pp. 69-94; The Century Company.

CHAPTER XXXI

PIKE AND FRÉMONT

Pike in Minnesota. While Lewis and Clark were making their way along the Missouri and Columbia rivers toward the Pacific, Zebulon Pike was searching for the headwaters of the Mississippi, in what is now Minnesota. He left St. Louis in August, 1805, and made his way slowly up the Mississippi. All winter he lived among the Indians and explored the cluster of lakes that feed the great river. See map of Lewis and Clarke and Pike Routes on page 233.

The Great American desert. The next year, however, Pike was back in St. Louis, where a new and difficult task was given him. He was to explore the unknown upper waters of the Red River and visit the tribes that dwelt upon the upper Arkansas. If possible, he was to persuade the Comanches to come to St. Louis for a conference.

With a company of about twenty men, Pike started in July and made his way by boat up the Missouri to the Osage, and up that river to the village of the Osage Indians. There he secured horses and followed the Osage River to its source. From here he bent his way through what are now the prairies of Kansas, which he found gay with autumn flowers, to a point on the Re-

publican River in Nebraska, where dwelt the dreaded Pawnee Indians. The Pawnees were unfriendly but made no attack on Pike's men. Pike was the first explorer in this region. He described the fine grazing plains of Nebraska and Kansas as a "desert" because

Photo by Elmendorf. © *Ewing Galloway*

THIS ELECTRIC RAILWAY CARRIES PASSENGERS TO THE SUMMIT OF PIKE'S PEAK

they were dry and treeless. So the name, Great American desert, was given to a large section where are now fine farms and ranches.

Pike's Peak. Then Pike turned southwest until he came to the Arkansas River, which he followed to

a point near what is now Colorado Springs. He measured the height of the towering peak that now bears his name and tried to climb it, but gave up the attempt, saying that it could not be done. To-day you can go to the top of Pike's Peak on a railway or by automobile and thousands of tourists are carried to its summit every year.

In search of the Red River. Pike found the mountain ravines choked with snow and sometimes the roaring rivers were bridged with ice. But he stoutly followed the Arkansas to the present site of Leadville, where he was forced to turn back. He said that only a madman would try to go farther. He was constantly searching for the Red River, which he was told to explore.

Captain Pike continued his march even in the dead of winter, suffering terribly from the intense cold. The snow was waist deep, and the men, who were half clad, were depending for food upon the buffalo. But the buffalo herds had left the plains and taken refuge among the mountains. The explorers often went two days without food. Once Captain Pike almost perished from starvation and two of his men had their feet so frozen that the bones came through the flesh.

But Pike would not give up. He left the sufferers in a rude camp and pushed on southward until, at last, in January, 1807, he passed through a gap in the mountains and beheld the waters of the Rio Grande, which he thought was the Red River. "At last," he cried, "I have found the Red River," and hastening to its

banks he selected a site and put up a strong fort. Then he sent back for his baggage and his worn-out companions. Before they came up, the Spaniards, who then held the Santa Fe country, came upon him in large numbers. Finding him on Spanish soil, they captured him and took him to Santa Fe. After a time, Pike was released and made his way back by a southern route through Mexico and Texas to the Red River. The report of his journey led to much overland trade with Santa Fe.

Photo by Brown Bros.

KIT CARSON

Frémont. John C. Frémont spent several years in exploring the passes of the Rocky Mountains. On his first trip he took with him twenty men, with the great hunter, Kit Carson, as a guide. They followed the Santa Fe trail for some distance and then went up the Platte River into the territory which is now Wyoming. Several Indian tribes were on the warpath, but Frémont went boldly on. He climbed the highest mountain peak he could find and planted the Stars and Stripes there. The food supply became low but the men lived on buffalo meat, fried in tallow, with

a little coffee and macaroni. They came back safely to Missouri.

Later Frémont made other journeys into the Rockies and came upon the Great Salt Lake. He was most successful when he had Kit Carson for a guide. On one or two occasions when Carson was not along he became lost in the mountains and nearly starved to death.

Frémont has often been called the "Pathfinder" because he explored so many of the passes in our western mountains. Many of them are now traversed by railroads. He led two expeditions to the Pacific coast. He made maps of the trails he discovered and they were followed by many of our settlers that went west.

Questions and Problems

1. Trace upon a map Pike's expedition.
2. Why did Pike speak of what is now Kansas and Nebraska as a desert?
3. Tell what you know of Pike's Peak.
4. What results followed Pike's journey to Santa Fe?
5. Find out all you can about Frémont and report to your class.
6. Would you have liked to go on one of these exploring trips? Give reasons for your answer.

Books to Read

Kingsley, N. F. — *Four American Explorers*, pp. 135–196; American Book Company.

McMurry, C. A. — *Pioneers of the Rocky Mountains*, pp. 40–94; The Macmillan Company.

PAXSON, F. L. — *The Last American Frontier*, pp. 70–75, 138–155; The Macmillan Company.

PERRY, F. M., and BEEBE, K. — *Four American Pioneers*, pp. 197–249; American Book Company.

TAPPAN, E. M. — *American Hero Stories*, pp. 246–254; Houghton Mifflin Company.

CHAPTER XXXII

THE PIONEER ON THE PLAINS. THE MORMONS

Early life on the plains. After the purchase of the Louisiana country and the expedition of Lewis and Clark, the hunter-pioneer moved across the Mississippi, and pushed up the tributaries of that big river, which flowed down from the west. The boldest of these hunters pushed far westward and set their beaver traps on the headwaters of these streams. Others, who preferred the roaming life, advanced into the level country of the plains and took up large sections of land upon which to graze their cattle. When the farmer-settlers began to press upon them they moved on again, hunting, trapping, rounding up their cattle, and planting an occasional field. They built cabins and laid fences; but before the wood in them was well seasoned, they sold the place and embarked in their canvas-covered wagons toward the sunset wilderness.

Settling Missouri. Missouri was the most quickly settled of all the states west of the Mississippi; and, if you will consult your map (page 184) you will easily see why this was so. Hither flowed the Ohio, with its many tributaries, bearing boats upon its bosom from the east; from the north came the Illinois River, and from the north and south the Mississippi

River—all landing settlers upon the eastern borders of the state. So emigrants came to Missouri from nearly every portion of the east. Among them were the famous Daniel Boone and his sons, who liked plenty of elbow room. On the west side of the Mississippi, the great Missouri offered an easy pathway inland for the settlers.

There were negro slaves in Missouri when the United States bought this territory from France, and our government promised not to interfere with slavery here. In this way Missouri was early fixed as a slave state. Emigrants from other slave states, like Kentucky, Tennessee, Virginia, and North Carolina, came to its borders in great numbers, bringing their negroes with them. Other settlers came from New England by way of the Erie Canal, the Great Lakes, and the Illinois River. Among many foreign immigrants were thirty thousand industrious Germans. After steamboats became common, emigrants from foreign countries began to land at New Orleans and ascend the Mississippi by steamboat to this western country.

Following the rivers. The settlers spread out westward along the valleys of the tributaries of the Mississippi. There was a narrow belt of settlements along the Mississippi and the Des Moines rivers. So it was with other tributaries coming down from the west. A broader belt followed up the Missouri chiefly upon its northern or prairie side, to the great elbow of this river. The settlers seized eagerly upon the sections that were thickly timbered and upon those

having water power suitable for mill sites, because mill sites were scarce in this level country.

Pioneers in Iowa. Settlers from Missouri spread northward into Iowa. As soon as the government purchased the land of eastern Iowa from the Indians,

Photo by Brown Bros.

A LEAD MINE

pioneers rushed in and occupied the rolling prairie. Settlements spread rapidly north to where Burlington and Salem are now located. Two hundred miles farther up the Mississippi River, Dubuque was founded and became a new center to distribute emigrants to the northern part of the state.

The lead mines. The lead mines of northern Illinois, about Galena, attracted settlers to that region. The mines had been worked by the Indians and by French traders from early times, and the story was spread abroad that they were the richest lead mines in the world. Mines were also located near Dubuque. Many emigrants pushed up the rivers of Iowa, especially the Red Cedar and the Des Moines, and also up the Missouri to Council Bluffs. Iowa was not a slave state, so settlers came in large numbers from the north and east by way of the Erie Canal and the Great Lakes.

Pioneer life in Missouri and Iowa. Pioneer life in Missouri and Iowa was like that of earlier days in Ohio and Kentucky. For the first few years it was hard work and simple living. A settler who moved from Virginia to Iowa in 1854 complained that for a whole year in the frontier country he saw no fruit except a half peck of crab apples. For a long time corn was pounded in a mortar by hand. Steam mills were introduced in St. Louis in 1825, but in other parts of Missouri and in Iowa the mills continued to be worked by oxen or horses. Lumber was costly, because of the lack of water power sawmills. Conditions were much the same in Kansas, Nebraska, and Minnesota when they were first settled.

The Mormons. About this time the Mormons migrated across the plains. The Mormons are a religious sect whose church was first started in New York by Joseph Smith. They moved to Ohio and then to Illinois. Some of their religious beliefs were so differ-

ent from those of the other churches that they were persecuted. In Illinois their leader, Joseph Smith, was killed by a mob, and the Mormons decided to make a home for themselves in the wilderness of the far west.

Led by Brigham Young, they passed westward, driving their cattle and carrying their other possessions with them. After months of weary travel, Young and his band of one hundred and forty-three men, women, and children reached the desert country of Great Salt Lake, where they settled. In a few years the Mormons had turned the desert into a beautiful garden spot by digging ditches to irrigate the land. They built Salt Lake City and founded the state of Utah.

Questions and Problems

1. Why was Missouri so speedily settled?
2. What parts of the new states were settled first? Why?
3. How did it happen that Missouri was a slave state while Iowa was a free one?
4. Tell what you can about the early Mormons.

Books to Read

Beard, C. A., and Bagley, W. C. — *The History of the American People* (Revised Edition), pp. 271–293; The Macmillan Company.

Neihardt, J. A. — *The Splendid Wayfaring;* The Macmillan Company.

Paxson, F. L. — *The Last American Frontier*, pp. 86–103; The Macmillan Company.

Guerber, H. A. — *Story of the Great Republic*, pp. 117–121; American Book Company

CHAPTER XXXIII

THE SANTA FE TRAIL

Trading with western Indians. Captain Bignell of Missouri started west in 1821 to trade with the Indians. When he had reached the headwaters of the Arkansas, he met a party of Mexicans who prevailed upon him to take his merchandise to Santa Fe. Here he obtained for his goods such high prices that others were eager to follow his example, and thus commerce with the far west was promptly begun. Calico of the most common kind brought from two to three dollars a yard at Santa Fe. The following year Bignell returned to Santa Fe with goods of all kinds worth many thousand dollars.

Blazing a new trail. On this trip, Bignell pushed out southwest over the Cimarron desert, which was a much shorter route to Santa Fe, though more dangerous. He has been called the "Father of the Santa Fe Trail," because on a part of this journey he was the path breaker. Bignell cached, or stored, some of his goods at one point, because he had too much to carry over the desert on one trip.

His party suffered intensely from thirst because the water supply which they carried in their canteens soon gave out. One day, at last, they followed in the direc-

tion from which a buffalo had appeared until they found a river and quenched their thirst. They came back with their canteens filled to relieve those who had been too weak to follow them to the river. Bignell's party finally reached Santa Fe. They were the first white men to make the journey through this terrible desert. Other bold men followed in this path, but in spite of all their care to provide water, they usually suffered great thirst and sometimes even death on the desolate desert trail.

The caravan. After the trail was well established there was still danger to a trader making the journey alone. So the caravan system was adopted. The caravan consisted, at first, of a train of loaded mules and burros. These animals could carry only small loads, but when wheeled vehicles came to be used, in 1824, the trade over this trail grew rapidly.

East of the Mississippi it was an easy matter to get to market, because of the numerous navigable rivers. But on the dry plains and among the Rockies there was no chance for travel by water. The freight wagons could bear much greater burdens than the pack horse of earlier days, and a system of wagon freighting was used over the Santa Fe trail to the headwaters of navigable rivers farther east.

The men of the party chose a train master, or captain, and all were under his command. Each man had his place and duty, and each was expected to take his turn as a night watchman, for in those days the savages were on the warpath most of the time, and there was no tell-

Courtesy of Criterion Theater Publicity Dept.

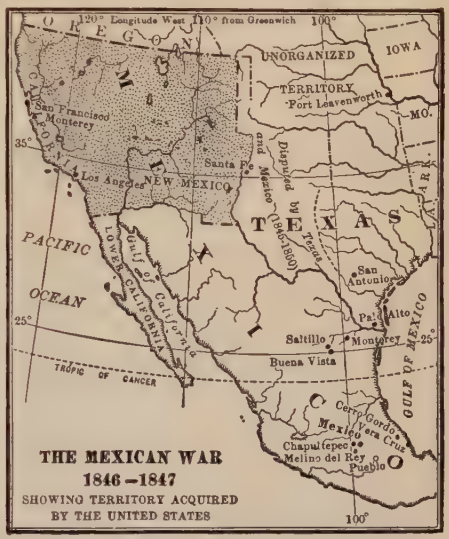
A CARAVAN TRAIN GOING WEST

ing when the hostile red men would pounce upon them. There were many wagons in the train, and in order to be ready for an Indian attack they moved in two columns side by side, about thirty feet apart. Each team followed close upon the one just in front in the line, and all loose saddle horses were driven along between the wagon rows.

Ready to fight. When the alarm of "Indians" was given, the head and rear teams of the two parallel columns turned in toward each other. In this way they closed up the ends in front and rear and formed a long rectangle of wagons, which was open in the middle. As all the loose riding animals were hemmed in between the two columns of wagons, they were safe when the attack came. The wagons were often loaded with cotton goods in bales, and these made excellent breastworks for the marksmen who stood within the square. The Indians had much difficulty in breaking through the breastworks of one of these hardy caravans, because it was defended by some of the best riflemen in the world.

Later caravans. Small wagon trains were frequently destroyed by the red men, but in later days the train was commonly made up of eighty or one hundred wagons, with perhaps two hundred men in the party and with six or eight hundred mules or oxen. The merchandise carried by such a train might be worth half a million dollars. It took about ten weeks to make the trip over the Santa Fe trail. One trip was started in the spring, and the party returned in the fall.

The "Iron Horse." The Santa Fe wagon trade lasted only about twenty years. It reached its height in 1843, but after this declined rapidly. New Mexico, at this time, belonged to Mexico, whose president, Santa Anna, at last forbade the trade. In 1846 the United States and Mexico were at war, and at the close of the war this territory came into the hands of Uncle Sam. The first steam train over the Atchison, Topeka, and Santa Fe Railroad reached Santa Fe in 1880, and after this the trail was no longer used for purposes of trade, since all goods were carried over the iron road. The steam engine was called an "iron horse."



Questions and Problems

1. Trace on a map the Santa Fe trail.
2. What caused the suffering on Bignell's expedition?
3. Why did the traders of those days travel in caravans?
4. Why was a train master or captain needed in each caravan?
5. Pretend that you have made a caravan trip to Santa

Fe; give a talk before the class, urging that a railroad be built over this trail.

6. Let some classmate give a talk opposing a railroad.

7. Find out all you can about the Atchison, Topeka, and Santa Fe Railroad.

Book to Read

Paxson, F. L. — *The Last American Frontier*, pp. 53–69; The Macmillan Company.

CHAPTER XXXIV

THE STORY OF TEXAS

Sam Houston. Before reading much about Texas, you must know the story of Sam Houston. Houston spent his early life amid the forests of Tennessee. He loved the wild life of the forest and took part in many Indian fights. Later he moved across the Mississippi and made his home with an Indian tribe beyond the river. A chief who had known him as a boy gave him a kindly welcome. "Rest with us," he said, "my wigwam is yours." After staying among these Indians for three years, Houston went to Texas, which at this time belonged to Mexico. There were, however, many Americans who had moved there who wished that Texas might belong to Uncle Sam. Houston said: "I will make Texas a part of the United States."

Fort Alamo. War soon broke out between Texas and Mexico and Sam Houston led the Texan soldiers in their battle for independence. In his army were many American pioneers and hunters. There was David Crockett of Tennessee, whose motto was: "Be sure you are right, then go ahead." Then there was Colonel Bowie of Louisiana, who had invented the bowie knife. Bowie and Crockett and a small force of men fortified and held the Alamo, which was an old

Spanish church in San Antonio. Santa Anna, the Mexican president and general, with a large army stormed the fort and killed every man in it.

The Lone Star State. Soon afterwards General Houston, with seven hundred and fifty men, surprised the Mexicans, who were about eighteen hundred strong. The Americans and Texans went into battle crying: "Remember the Alamo." They quickly put Santa Anna's big army to flight. Texas became an independent state and the people made General Houston their president. They raised a flag which had on it a single star. For this reason the state is still called the "Lone Star State."

But Texas did not wish to stand alone, and she soon asked the United States to admit her to the Union. Our Congress was divided on the question for many years because Texas had slavery. The people of the free northern states objected to receiving Texas because they said "it only adds so much more slave territory to our country." But the people of the south were very eager to receive Texas under the Stars and Stripes. They carried the day at last and Texas became a part of the United States.

Now there was a dispute between Texas and Mexico as to the correct boundary line. Texas claimed the Rio Grande River as her southern boundary, while Mexico objected. She said: "Texas extends only to the Nueces"; so the United States, defending Texas, entered upon a war with Mexico which lasted three years.

The Mexican War. President Polk sent General Zachariah Taylor with an army to Texas. He marched into the disputed territory and drove the Mexicans out, then crossed the Rio Grande into Mexico, where he again defeated the Mexicans in two great battles. In both battles he was greatly outnumbered by the Mexicans under General Santa Anna. The President also sent General Winfield Scott to Mexico, but by another route. He went by water to Vera Cruz, where he landed his army and fought his way to the City of Mexico, which he captured. The Mexicans then begged for peace.

In the treaty of peace Mexico was forced to give the United States an immense tract of land which extended from the top of the Rocky Mountains westward to the Pacific Coast. You will see by observing the map that it included California, Arizona, Nevada, and Utah, besides large parts of New Mexico, Colorado, and Wyoming. Thus in 1848 the United States extended its western territory to the Pacific Ocean.

Questions and Problems

1. Find out all that you can about Sam Houston and tell the class about him.
2. Pretend that you are a Texan; give a talk opposing Texas entering the Union.
3. Give the reasons why the army of the United States defeated that of Mexico.
4. Do you think the United States was justified in helping Texas against Mexico?

5. Draw a map showing the territory we won by the Mexican War.

Books to Read

Bryan, G. S. — *Sam Houston;* The Macmillan Company.

Coffin, C. — *Building the Nation*, chapters XX–XXV; Harper and Brothers.

Perry, F. M., and Beebe, K. — *Four American Pioneers*, pp. 135–188; American Book Company.

Roosevelt, T. — *Stories of the Great West*, pp. 55–69; The Century Company.

Tappan, E. M. — *American Hero Stories*, pp. 237–246; Houghton Mifflin Company.

CHAPTER XXXV

GOLD IN CALIFORNIA

Early settlers. The country bordering the Pacific was a wilderness long after the eastern part of our

Photo by Elmendorf. © *Ewing Galloway*

AN ADOBE HOUSE, NEW MEXICO

country was well settled. As late as 1848 there were but a few thousand people in all California. The scattered inhabitants were a strange mixture of Yankees,

Mormons, Mexicans, and Indians. There were also a few negroes and Spaniards. Most of these people lived in log huts, or adobe houses, which were made of clay. Their humble dwellings were scattered about through the wilderness near cattle ranches or mission stations. In some places clusters of huts later grew into towns or cities.

John A. Sutter. There was a rude village at San Francisco. Northeast from this village lay the beautiful valley of the Sacramento River, one of whose early settlers was a man in whom we shall be very much interested. He was a Swiss, named John A. Sutter. Sutter had come to California in 1839 and had taken up several thousand acres of land along the American River, a branch of the Sacramento River. Near the mouth of the American River he had built a fort which people far and near called Sutter's Fort, and which became a center for all the settlements in this region. Sutter was a wealthy man. He owned twelve thousand cattle, fifteen thousand sheep, and much other property. To care for this stock he employed several hundred men. He was truly a prince in this western wilderness.

In Sutter's employ was a man named James W. Marshall, a carpenter who had emigrated from New Jersey. As there was a wealth of timber upon the surrounding mountains, Sutter decided to build a sawmill. He chose Marshall to manage its construction. They selected a site on the south fork of the American River about forty miles east of Sutter's Fort and near

the foothills of the Sierra Nevada Mountains. The exact place they called Coloma. Marshall collected a few Indians and white men and began to build a sawmill here in 1848, just before the Mexicans were forced to cede California to Uncle Sam. It was necessary to dig a millrace, and in doing this they used a strong current of water to wash away the loose earth.

Discovery of gold. One afternoon in January, as Marshall was walking about the millrace, he noticed glittering yellow particles in the sand. It looked like gold. Marshall examined it, and became convinced that it was indeed gold. So he mounted a horse and made haste to Sutter's Fort. He found Sutter alone and displayed his nuggets. They tested the yellow metal in every way they could. When they had hammered it thin and tested it with acid they were certain that it was gold.

It seemed best to keep the matter a secret for a time, but such secrets are hard to keep. It was not long until all the settlers in the valley had heard of Marshall's discovery, though most people refused to believe it. They were anxious, however, to go up into the valley and see for themselves, and they made all sorts of excuses for going.

More than three months passed by before the people of California were fully alive to the great discovery. In the following May some miners from the American River came to San Francisco carrying bottles, tin cans, and buckskin bags filled with the precious gold. One man, holding up a bottle of the yellow dust in one hand

and swinging his hat in the other, walked along through the streets shouting, "Gold! Gold! Gold from the American River!" The people no longer doubted it.

California gold craze. Now no story was too big to be believed and everybody began to rush for the gold

AN EARLY GOLD-MINER OF CALIFORNIA

fields. Many sold their property and set off at once. Business in San Francisco came to a standstill. There were two newspapers at that time, but there were no editions printed, because their printers had departed for the gold fields. In a few weeks three-fourths of all the men in town had gone to the mines. As everybody wanted tools, the price of shovels, pickaxes, blankets,

and other supplies rose in value in a few days to six times their former price. The town council could not hold its meetings, the church was closed, farms were deserted, and waving fields of grain were allowed to go to waste. The doctor deserted his patients, and officers neglected their duties. The exciting news gradually spread down the coast to Monterey, Los Angeles, and San Diego. Everywhere the people went wild over the report, and the one cry along the whole coast was "Gold! Gold!"

The discovery of these rich gold mines soon changed the appearance of northern California. People no longer wished to care for horses and cattle on great ranches, or to cultivate small patches of ground. All hurried to the mines, and townspeople, who wished to hire a carpenter or other mechanic, had to pay him more than he could get at the camp. Carpenters were paid fifteen and twenty dollars a day, and a cook was sometimes paid three hundred dollars a month. Sailors deserted their ships and soldiers left the garrisons for the mines. Four or five ships belonging to Uncle Sam, which arrived in the harbor off Monterey, dared not land because the moment a sailor set foot on shore he deserted and hurried after gold.

The "Forty-niners." Before the summer was over there were four thousand men in the Sacramento Valley searching diligently for the nuggets of gold. California was not yet connected with the east by telegraph or railway, or even by wagon road, so the news traveled slowly to the eastern states. But the following year

seventy-five thousand gold seekers had reached San Francisco and passed on to the gold valley. As this was the year 1849, the first gold seekers were called "forty-niners." The news spread over the world until there were men from all parts of the globe headed for the Pacific coast. From the eastern states great caravans of wagons called prairie schooners began to move across the western plains, bound for California.

Many from the east sailed around Cape Horn on a long weary voyage to California. A large number went by water to the Isthmus of Panama and journeyed overland through the tropical jungles for fifty miles to the City of Panama, where they took ship for San Francisco. Some arriving at Panama found that the boats which had sailed for San Francisco had been deserted by their crews at the Golden Gate and could not return. For weeks and months thousands of these people, unable to go farther, were forced to remain on the isthmus, where the deadly climate sent many to their graves.

Hardships in the desert. Many a gold seeker winding his way across the western plains found a nameless grave, for a terrible disease, known as cholera, spread among the emigrants. But in spite of the dangers of the journey and the dread disease, great numbers continued to risk the trip overland to the west. Sometimes there was a line of wagons unbroken for miles and at night numerous camp fires were grouped like a city. Some of these travelers brought their families with them, but most of the men were unmarried, or

had left their families in the east, hoping to return to them loaded with wealth. Large numbers died of starvation or of thirst in passing through the terrible deserts.

The gold region. Such was the mad rush for California that within three years after gold was discovered,

From an old print

AN EARLY GOLD MINE IN CALIFORNIA

there were one hundred thousand men at work in the gold mines. For a time Coloma, where the yellow metal was first found, remained the center of the gold-seeking country. However, as large numbers continued to enter the field, they spread out until they had covered most of the Sacramento Valley and the western slopes of the Sierra Nevada Mountains. Then they overflowed to the south and spread out through the valley

of the San Joaquin. One writer said, "The people were running over the country and picking gold out of the earth just as a hog let loose in a forest would root up the ground nuts." One man employed sixty Indians and made a dollar a minute. Seven men, with fifty Indians, gathered in seven weeks two hundred and seventy-five pounds of pure gold.

In some places there were found very rich gold deposits. On a claim a few feet square there was taken out ten thousand dollars' worth of the precious metal. They found gold in all forms, in seams in the rock, in scales, pellets, and in grains in the sand. Occasionally, a man would pick up a nugget weighing a pound or more. The largest piece of gold ever found in California was discovered by five poor men in 1854. It weighed one hundred and sixty-one pounds, as much as a grown man. The gold in it was about seven eighths pure and brought the men thirty-five thousand dollars. We are told that gold to the amount of sixty-five million dollars was obtained in California in one year, and in eight years it amounted to five hundred million.

Rich become poor. From this immense sum you might imagine that every miner became wealthy, but this is not true. A few were wise enough after finding rich ore to gather up their wealth and leave the country before they spent or wasted what they had found. Some steady men, who had left their families in the east, worked hard gathering gold dust until they were well-to-do, and then returned to their homes. Most

of the miners, however, wasted all the wealth they secured, always hoping to find more. Large numbers died from exposure and others went home, defeated and disappointed.

Marshall and Sutter. Marshall, who first discovered the precious metal, proved to be most unsteady. He went hither and thither among the mines, always looking for some unusually rich treasure. He became discouraged over his poor luck and despondent over his failure. He passed away all alone in his cabin, poor and almost unnoticed. Some years later the State of California gave five thousand dollars to erect a monument to his memory. It is placed on a hill near the place where gold was first discovered. On the monument stands a figure of a man with outstretched hand, the finger of which points to the very spot where Marshall picked up the first shining nugget of gold. Sutter also was a failure. When he gave up cattle raising and tried to hunt gold, he lost all his property, land, and cattle, and his laborers scattered far and wide.

The miners. Many of the miners were shiftless men, who hastened to the drinking and gambling dens as soon as they received their week's income, and stayed there until every penny was gone. One miner, who had searched in vain for many weeks, found at last a pocket of gold in a river bank from which he took out in a few hours several thousand dollars' worth of the metal. But success got the better of him, and before the first night passed he was drunk and penniless.

The gold miner dressed in a woolen or checked cotton shirt, with loose trousers tucked into high wrinkled boots. He wore a slouch hat and a belt about the waist in which he kept his knife and pistols. When too far from camp to return at night, he slept under the open sky on a bed of leaves or wrapped in his blanket. Men living this way became rude in manners and habits. They lived after a time very much like the Indians. Anybody who undertook to dress well, or to display polite manners, was quickly hooted and ridiculed. The miner's hair went untrimmed and fell about his shoulders, and his unshaven beard was wild and shaggy. The average miner was honest and faithful to his friends, but when any one took advantage of him, he looked to his knife and pistol for protection.

Longing for home. As most of these men were unmarried, or had left their families in the east, there was no family life in the mining field. The gentle influence of woman was greatly missed. It is said that these rough pioneers would often walk ten miles or more simply to see a woman without even expecting to become acquainted with her. Sometimes a miner would meet a little girl in the street of a mining town and would catch her up in his arms and kiss her repeatedly, and as he let her go would fill her little hand with gold dust. For several years there were far from enough women on the Pacific coast to make homes for the men. It is said that a woman in those days might commit any sort of crime in California and no jury could be found to convict her.

Growth of San Francisco. After the first wild rush was over, great numbers of people continued to come to California to make that land their permanent home, and to build up the Golden State. Sites that were fortunately located were quickly covered with buildings and the towns grew into cities. San Francisco was growing very rapidly. Long wharves were built. The hulks of abandoned ships were moored along the shore and used as shops and dwellings. Houses had been built on piles and the people had begun filling in with earth. Streets were soon cut through the hills and seven miles of streets graded. Along most of the way plank sidewalks were laid. San Francisco suffered dreadful fires, but nothing could stop her growth. People came in great numbers from Mexico and Chile, from China, England, France, and Germany, while thousands of Americans crossed the continent to make their homes in the Golden State. It was not many years before California was eager to become a state of our great Union, and to have a star upon our flag to represent her.

Questions and Problems

1. Tell the story of Sutter.
2. What would you have done if you had discovered gold as Marshall did?
3. Let one pupil pretend he had gone to California by way of Panama, and give a talk to the class describing his journey.
4. Let another do likewise with the overland journey.

Photo by Brown Bros.

THE GOLDEN GATE

5. Trace the journey of the "Forty-niners" on a map.

6. Let the girls each write three questions on this chapter for the boys to answer and the boys each write three questions for the girls to answer.

Books to Read

Elson, H. W. — *Side Lights of American History*, Vol. I, pp. 243–259; The Macmillan Company.

Faris, J. T. — *Real Stories from Our History*, pp. 169–195; Ginn and Company.

Guerber, H. A. — *Story of the Great Republic*, pp. 139–147; American Book Company.

McMurry, C. A. — *Pioneers of the Rocky Mountains*, pp. 94–114; The Macmillan Company.

Paxson, F. L. — *The Last American Frontier*, pp. 104–118; The Macmillan Company.

Sexton, E. M. — *Stories of California*, pp. 37–46; The Macmillan Company.

Sparks, E. E. — *The Expansion of the American People*, pp. 336–350; Scott, Foresman and Company.

CHAPTER XXXVI

ACROSS THE CONTINENT

California immigrants. In the first ten years after the discovery of gold in California, the people who crossed the mountains followed what was called the Platte River route. It started from Council Bluffs, Iowa, a frontier town at that time called the "jumping off place for California immigrants." Here the people usually organized small companies or parties. One such party consisted of sixty-nine persons, including men, women, and children. They had oxen, mules, and horses, but no cows, and suffered much, especially the children, on account of lack of milk. Later immigrants took cows with them.

Supplies for the journey. The members of each company were provided with flour, sugar, dried beans, coffee, and bacon, or side meat, and other supplies. In those days there were no canned goods. In western Iowa and Missouri, it is said that hogs, fattened on acorns, were killed in great numbers, and the side meat, after it had been cured, was piled up like cord wood to be sold to the emigrants who were laying in supplies. Each man carried his flintlock rifle. Percussion caps were in use in those days, but the old hunters advised against guns of this sort for a westward

journey, because if the caps got wet they would not explode.

On the trail. When the party set out, it was not decided who would drive the oxen or do the cooking, or who would mend the tattered clothing of the party. There was much quarreling and grumbling when the work was divided, and it was some days before every man fell into the job that he could do best. If one man criticised the way another did his work, he was told to try his hand at it. If any one objected to the cooking he was told to show the others how cooking should be done. The best manager of cattle was finally discovered and given the post of driver. Before the company had gone far the ablest men were given the important work and became the leaders. There was often considerable fighting in the camps along the trail, on account of the way the labor was divided, but no drones were allowed and the lazy man was driven from the party.

The people usually walked because the wagons were loaded with provisions, and no more horses were taken along than were absolutely necessary, as it was difficult to obtain food for them. Some of the pioneers walked all the way from Missouri to Sacramento. Scouts were usually sent ahead of the party to look for a suitable camping place where there were grass, wood, and water.

Camping along the trail. There were many companies moving along this trail at the same time, but nobody appeared to be in great haste. When they

found a pleasant camping place with plenty of wood, water, and grass, they halted and took a rest, sometimes for several days. During this time they reset the wagon tires, repaired the ox-yokes, mended clothes, and had a general clean-up of the entire outfit before proceeding on their journey. If the trail just before them was a very difficult one, they made a longer stop and a more thorough overhauling. A good day's journey was twenty or twenty-five miles, and it was possible to learn from the people along the way the distance to the next camping place.

The route from Omaha lay westward to the Platte River, which was followed to where it branches into the North and South Platte. The route followed the North Platte by way of Scott's Bluff to Fort Laramie. Along the Platte, one day was much like another because the country was level. The party set forth every morning, traveled some twenty miles, and camped at night in a hollow square, with men to stand guard. The only excitement they were likely to have was a tornado, sometimes followed by a hailstorm.

Indians along the way. The early emigrants were greatly frightened at sight of the red men. At first each driver started his team of oxen or mules or horses at a full gallop, trying to escape them. But only a few of the Indians were hostile. They occasionally came along by an emigrant train and talked to the people by signs, trying to barter for guns, powder, and lead. The Cheyennes came to camp to sell buckskin or moccasins, sometimes to beg or steal. Each com-

pany, however, parked its wagons in a circle at night so as to use them as a defense in case of attack, and watchmen were always kept on guard.

Beautiful scenery. As they came to the foothills of the Rockies, the emigrants met with magnificent scenery, passing through rocky canyons sometimes twenty miles long. The parties frequently loitered here to enjoy the marvelous beauties of nature — the high-towering cliffs, the long columns of stone of many colors, the trees and vines that line the canyons, and the beautiful waterfalls streaming down over the high rock walls.

Short rations. Food was usually plentiful until they passed far into the mountains, when it was frequently scarce. On some parts of the journey there was plenty to be had; the cattle were knee deep in juicy grasses; while at other times along the sandy trail they had nothing but wilted grass that was carried along from the last camp. At times, the people had more fresh meat than they could use.

In the buffalo country. In the heart of the buffalo country, these animals were so numerous that they were a nuisance. Great herds were continually moving across the trail and trampling out the grass and polluting the streams and springs so that it was difficult for the emigrants to get drinking water. The buffalo moved in vast herds. Sometimes as far as the eye could reach, the trail was blocked with a heaving mass of buffaloes, covering the ground like a brown mantle of fur. As a party of emigrants came upon one of these

mammoth herds, the animals quietly separated to the right and left, leaving a lane along which the travelers moved with herds on either side of them. Presently they were completely hemmed in before and behind.

From an old print

A HERD OF BUFFALO

The buffaloes never showed fight. All they seemed to want was to be let alone.

Capturing antelope. When the emigrants reached the Rocky Mountains they found antelope, prairie dogs, black-tailed deer, jack rabbits, and sage hens, which furnished fresh meat. The antelopes were not only very wild and timid, but very swift of foot and no

one thought of giving chase to them. The emigrants soon discovered a way of bringing them down by strategy. The hunter tied a bright colored handkerchief to a ramrod which he stuck in the ground; then hiding close by with a rifle in hand, he kept watch for the antelope. A small drove of these inquisitive animals would spy the strange flag and begin to circle around it some distance away. They were so curious that after a time they came up close enough to be caught by the rifle ball.

Over the mountains. Crossing the Rockies, usually near South Pass, the travelers finally came to Bear River, which they followed to Great Salt Lake. Here flour might be bought at a fair price; many times they had used flour very sparingly because of its high price at trading posts along the trail. At Fort Bridger flour was thirty-five dollars a barrel and bacon one dollar a pound.

Across the desert. The trail passed along the north shore of Great Salt Lake and then entered the deserts of Nevada. There the pioneers endured intense suffering. Most of the animals died from lack of food and water. Food supplies were usually pretty well used by this time, and there was nothing growing. Often the travelers searched hours for water. On account of the extreme heat they marched at night and, when possible, spent the hottest part of the day in the shade. The dust and heat and sandy trail were almost unbearable. Sometimes the few animals that were left were killed for food, and the people went on afoot, carrying their possessions on their backs.

Sierra Nevada Mountains. The party followed the Humboldt River until it reached the Sierra Nevada Mountains, where there was wood to be had for the camp fires. The trail crossed over the sharp backbone of the mountains and down the western slope, coming out in California on the San Joaquin River.

California sends aid. Those who passed safely along the desert trail reported so many in distress on the way that the people of California hurriedly sent out relief parties. These parties hastened to the Carson River with food and animals, finding broken wagons, wheels, harness, trunks, and dead oxen strewn along the Carson Valley. They saved many who had lost their animals in the desert and were almost starving. Sometimes the emigrants had been living on the flesh of dead animals along the trail. Traders also hurried into the desert with flour and provisions to sell at very high prices. They had with them water, grass, and mules, and gathered together the cattle and wagons that had been abandoned.

Questions and Problems

1. The boys of the class may each write three questions on this chapter for the girls to answer and the girls may each write three for the boys to answer.
2. How would the supplies on a journey of to-day differ from those used on the overland trail?
3. Tell about the meeting with the Indians on the journey described in this chapter.

4. Why was there such great suffering on the overland journey? Could it have been avoided? If so, how?

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 169–195; Ginn and Company.

Sexton, E. M. — *Stories of California*, pp. 57–66: The Macmillan Company.

CHAPTER XXXVII

THE OREGON COUNTRY

The ship *Columbia.* While the Revolution was going on, the New England trade was driven from the sea and her ships disappeared. But no sooner was the war over than the Boston merchants resolved to build up a new sea trade. They had learned something about the Oregon country and the rich furs to be had from the Indians along that coast. So they fitted out the good ship, *Columbia*, and sent her forth. She was to go around South America and follow the coast up to the Oregon country, where her captain was to barter for furs with the Indians. He was then to carry these furs across the Pacific to Canton, China, and there exchange them for tea, which was to be brought back to Boston.

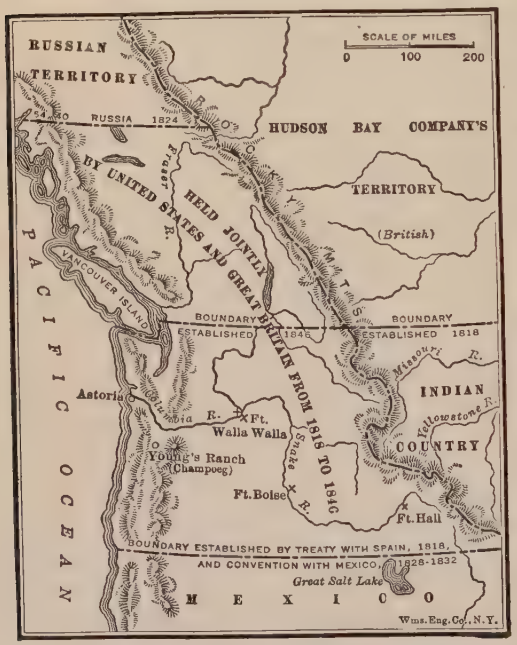
The *Columbia* sailed forth, flying the brand new flag of our country, the Stars and Stripes. In due time she carried the flag around the world and brought back a load of tea to Boston harbor. As she sailed into this port with the United States flag fluttering at her masthead, she fired a national salute and the fortress on land replied. The loud booming cannons brought the people to the wharves in crowds to see what ship was receiving such honorable welcome.

The Columbia River. In spite of their hopes, the owners of the *Columbia* had lost money on this first voyage, but they were determined to make a second trial. It was during this second voyage that Captain Gray sighted the mouth of a great river along the Oregon coast. The *Columbia* steered boldly for it with all sails set. She ran safely into a broad basin, in which no vessel had ever sailed before, and held her course for fourteen miles up the river. All about her there were swarms of canoes filled with Indians who were much interested in this great ship. Captain Gray was greatly delighted with the beautiful river and when he went away he named it the *Columbia* after his ship.

England claims Oregon. English ships later sailed along the Oregon coast, and England too laid claim to the Oregon country. For many years both the United States and England laid claim to Oregon and people from both nations settled there.

Whitman blazes the Oregon trail. It was a missionary who blazed the trail for the American pioneer-settler. Dr. Marcus Whitman and his bride set out as missionaries to the Indians in the Oregon country in the spring of 1836. They were accompanied by another recently married couple. It was a wild and exciting bridal tour for the two young women. The party joined some fur traders who were going across the Rockies. The missionaries made their way slowly over the dry plains, passing tribe after tribe of savage red men who crowded about to see the fair brides, the first white women they had ever seen. After ford-

ing many streams and climbing bravely over cold, rough mountain passes they reached their destination and settled as missionaries near the present town of Walla Walla in Washington. Here Whitman's party built a rude shelter and set to work to teach the red men agriculture so that they would give up their roving habits.



THE OREGON COUNTRY AND THE DISPUTED BOUNDARY

Now there were many British fur traders from Canada in the Oregon country and they did not want the Indians civilized, as they would then cease to gather in furs for them. Neither did they want a wagon road opened into Oregon, because settlers from the east would interfere with their trade. Hoping to discourage American emigration to Oregon, they sent word to the eastern states that the country was fit only for the prairie dog and the Indian. Meanwhile they tried to get the English to come from Canada and settle the country.

Whitman's mission was not very successful; therefore he resolved to return to the Atlantic coast and urge the people to come far west and settle. With a companion he started east on horseback. They crossed frozen rivers and made their way through mountain passes piled high with snow. They camped out in the freezing weather and ate what they could find. When they had come over the mountains Whitman found he must continue alone, for his companion had become so weak that he had to abandon the trip. He left his friend at one of the forts and went on.

Whitman at last reached the city of Washington. His long hair, fur hat, buckskin trousers, leather coat, and moccasins made a strange sight on the streets of the capital city. He went straight to one of the cabinet members and asked him to present to Congress a bill for Oregon settlement the plan of which he had outlined. He then went to Boston, where he raised money for his mission.

In June Whitman was back on the Missouri River on his way to the west. Men, women, and children, with two hundred wagons and a thousand head of cattle, went with him across the Rockies to Oregon to stay. They had farm tools and grain, but little by little they threw away their furniture to lighten their loads as they went over the mountains. Whitman persuaded them to keep their wagons until they got them through.

They reached Oregon in October, 1843, and at once began to build their homes. The next spring they

plowed the ground, planted seed, and raised good crops. During the next few years many companies of settlers passed along the Oregon trail with their wagons and cattle. The road was soon well worn. The Indians seeing so many pass declared that the country in the east must be deserted because so many people had gone to Oregon.

Dr. Whitman spent many years working to civilize the Indians. He healed their sick and was ever a kind friend to them. Mrs. Whitman taught a school in which at one time there were five hundred Indian boys. Then measles came among the Indians. They refused to follow Dr. Whitman's advice as to how the disease should be treated, and as soon as the fever came upon them they plunged into the river to cool off. There could be only one result and that was death. The red men became suspicious of the whites. At last they were urged on by some wicked British fur traders to massacre the settlers. They killed Whitman, his wife, and twelve other white people before they were quieted.

But thanks to this brave and noble leader who had been their guide, the Americans had now a firm hold in Oregon. They had succeeded in making settlements where the English had failed, for the Americans brought their families with them and had laid out farms upon which they expected to live the rest of their days. The English had failed because they came only with traps and guns and thought only of getting furs.

In 1818 our country and England had agreed to occupy Oregon jointly, and they continued this plan

for many years. In 1846 the Oregon country was divided by the forty-ninth parallel and all south of this line became American territory. The region has since been divided into the states of Oregon, Washington, and Idaho.

Questions and Problems

1. Why was the Columbia River so named?
2. What did nations need to do in order to make claims to a new country?
3. Why should Marcus Whitman be remembered?
4. Trace on a map the Oregon trail.
5. Would you rather have settled in Oregon or in California in those days? Give reasons for your answer.

Books to Read

Coffin, C. — *Building the Nation*, ch. xxvi; Harper and Brothers.

Guerber, H. A. — *Story of the Great Republic*, pp. 113–117; American Book Company.

Humphrey, M. G. — *Missionary Explorers among American Indians*, pp. 121–183; Charles Scribners Sons.

Paxson, F. L. — *The Last American Frontier*, pp. 70–85; The Macmillan Company.

CHAPTER XXXVIII

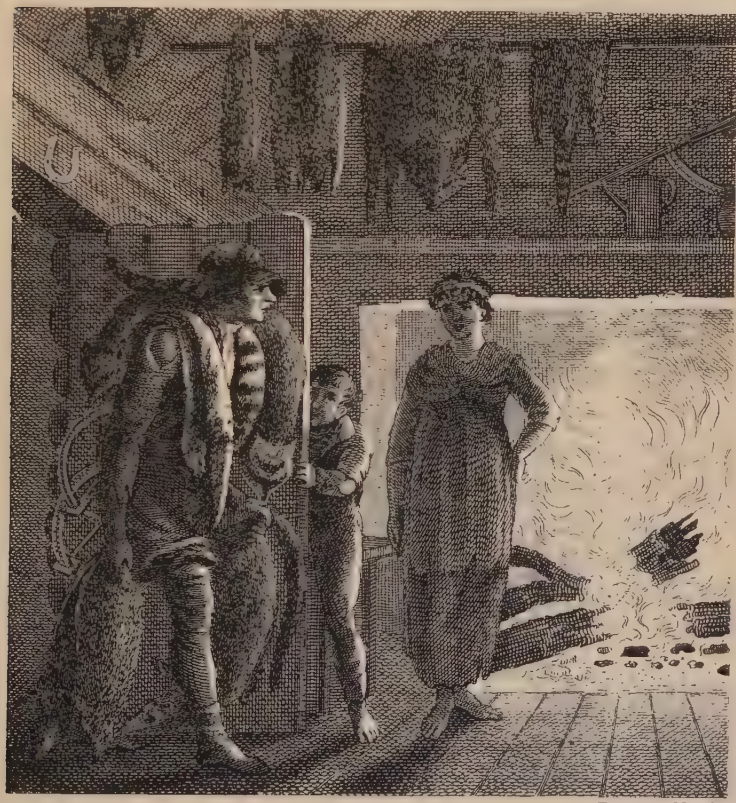
COMMERCE IN THE ROCKIES

Upstream transportation. Westward from the Mississippi all transportation was upstream, and therefore much more difficult than the downstream passages on rivers east of the Mississippi. It was difficult for people to get back and forth, and it was a big problem to transport finished products into the mountain country and bring back the furs and raw products of the trapper and miner. It required strong hearts with plenty of courage to do this work and brave the Indians at the same time. The fur traders blazed the trails. After them came the traders with pack horse and burro, then the wagon freighters to the Spanish country of Santa Fe, and later still the freighting trade to the mining camps of the Rockies.

Early trappers of the plains. The trappers and fur traders for a time held the vast plains across the Mississippi. These roving men did not care for farms because they knew quicker ways of earning wealth. They scorned agriculture, saying, "No sooner do you thrust a plow into the soil of the plains than you find it teeming with worms and useless weeds."

The early voyagers built great canoes of birch bark thirty feet long, four feet across, and three feet deep

which would carry a crew of ten men and six thousand pounds of furs. When this vessel reached waters too shallow to proceed, smaller barks divided up the load



From an old print

THE TRAPPER RETURNS HOME WITH MANY SKINS OF ANIMALS

and pushed on. In later days the keel boat was used on the larger rivers. The early trappers in Montana, having no birch bark, used the sun-dried hides of buf-

faloes to make boats. In these "bull boats" they carried millions of dollars' worth of furs on long journeys.

Use of dogs. When the waters refused to bear the burdens farther, the pack horse, the burro, and the dog took up the load of provisions. They followed the forest trail until the goods were finally given over to the trappers to be carried on their own backs. The Sioux Indians used the dog as a pack and draft animal before they got the horse. A dog could drag more on a pole frame than he could carry on his back. It was not unusual to see a great copper kettle lashed to poles and drawn by a dog. Six dogs could drag a thousand-pound load on the snow.

Mountain markets. The outposts among the mountains where the furs were gathered received their supplies once a year from the keel boats that were poled upstream. It often required six months to pass from St. Louis to old Fort Benton. But they could run the downstream journey in thirty days. The chief articles carried into the Rockies in the early days were liquor, blankets, blue and scarlet cloth, sheeting, tobacco, knives, axes, hatchets, fire-steel, files, arrow points, beads, and leather belts.

After a while the trappers would not take the time to come to market, so markets were established amid the Rockies, now in the Yellowstone region, now on the Green River in Colorado. A strange market place this was, and fabulous prices were asked because of the cost of carriage. Here the trapper paid from two to four dollars for a pint of coffee or a pint of liquor,

nearly as much for a pint of gunpowder, and half as much for a plug of tobacco. These ridiculous prices he paid in beaver skins, and the cost did not trouble him, because he knew a thousand streams where beaver abounded.

Gold in the Rockies. When gold was discovered in California people became interested in the wild mountains and the deserts that lay between the great plains and the coast. Miners from California later moved eastward among the Rockies in search of gold. The hunter and trapper in these remote mountains now met with an occasional companion in the wilderness, the gold seeker. The trapper cast his lot among the mountains because he loved change and excitement, but the prospector came there for love of profit.

It was not many years until the large number of people scattered about through the mountainous region brought more trade, for the miners needed supplies of many kinds. In a very few years Oregon, Idaho, and Montana were being scoured by miners and trappers.

The pack horse. The early commerce of this mountain country was carried by the horse or pony. Horses had probably been introduced into the western plains from Mexico, and the trappers and plainsmen loaded the animals with furs and other articles to be carried to and from the mountains. A horse or mule could carry from two to three hundred pounds of freight, while a burro carried from one hundred to two hundred pounds. Oxen and cows were also used with a fifty-pound load tied to their horns. The charge for car-

riage was from five to ten cents a pound for one hundred miles, sometimes more. A burro or mule would pay for itself by one mountain journey with a heavy pack.

It required much skill to pack a horse and tie on the load so that it would stay on for a long rough journey. Some clever packer discovered how to tie the load

Photo by Brown Bros.

PACK HORSES WERE USED FOR TRANSPORTING GOODS MANY MILES

with what came to be known as the "diamond hitch," which held the pack firmly on the horse for long trips over rough mountain passes. With this hitch the horse could stumble or even fall and his pack would not be lost. Since most of the commerce of this region was carried on pack horses, the diamond hitch was an important discovery.

A good pack master would undertake to transport any article that was needed in the mining camps. Heavy mining machinery was carried in on pack horses, but it was made in parts suitable to be carried in this manner. It was more difficult to ship cook stoves and other heavy articles. At one time a piano was carried to the mining camps by four mules. It rested on a sling of poles which supported it between the mules and bound them together, two in front and two behind. When the mules became too tired to climb farther, the piano was propped by short forked poles standing upright in the ground. The piano reached camp safely, but it cost one thousand dollars to transport it. Glassware and eggs were carried safely after being well packed. Boxes and trunks were carried over the mountains in this manner.

Origin of western cities. New cities began to spring up along the trails of this mountain trade, just as they did in the wagon days along the Santa Fe trail. At first these cities were mere stations for outfitting the miners, but soon they became freighting points. Such places grew up as Pueblo, Canyon City, and Denver. Beyond the mountains appeared Portland, Walla Walla, and Florence, which sent out long trains of mules and horses laden with goods. But pack trains could not long transport this trade. Men needed wagons to carry the heavy wares.

Stage express. Old-time stage lines were presently extending into the far west. One line ran from Atchison on the Missouri River across the plains and into

Montana by way of Denver and Salt Lake City. Some of these stages made great speed. Soon the distance was shortened by laying out straight roads which lessened the time. Some years later there were great stagecoaches moving along these mountain trails. One of Uncle Sam's officers, whose duties carried him into these regions, traveled over seventy-four thousand miles by stagecoach alone.

Mining camp prices. Transporting merchandise at a reasonable price to these mountain mines was still a problem. Flour sometimes sold as high as seventy-five dollars per sack because of the cost of bringing it in by stage. It was so expensive that we read of the great joy when board was reduced to twenty dollars in gold per week. During the days when flour was scarcest, some of the boarding houses in Helena posted the following signs:

Board with bread at all meals.....	$32.00
Board without bread.....	$22.00
Board with bread at dinner only....	$25.00

In the days of the trappers foodstuffs were usually sold by the pint, but later these articles were sold by the pound. Sugar in the mining camps often sold for fifty cents a pound, while potatoes brought twenty-five cents a pound. The merchant in selling potatoes often reserved the peelings for planting.

Questions and Problems

1. Why did not the trappers and fur traders engage in agriculture?

2. Why were pack horses and dogs needed by the trappers?

3. What was used as money by the trappers?

4. How did the discovery of gold in California affect interest in the Rockies?

5. How were heavy articles transported to the mining camps?

6. Where did cities grow?

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 93–97, 207–212; Ginn and Company.

Parkman, F. — *The Oregon Trail*, pp. 264–279; The Macmillan Company.

CHAPTER XXXIX

THE PONY EXPRESS

California a state. California grew marvelously fast after the discovery of gold there. In 1850 it was admitted to the Union as a state. There was at that time no railroad across the continent; so, in the fall of 1854, Senator Gewin of California made the trip from San Francisco to Washington, D. C., on horseback. He came by way of Salt Lake City and South Pass, which was then called the central route. For a part of the journey he had as a companion B. F. Ficklin, who was a member of a firm that was carrying freight across the western plains.

The Pony Express. Ficklin became interested in establishing a Pony Express to carry mail from the frontiers west of the Mississippi across the mountains to California. A company was soon organized, which had a very long name. It was called the Central Overland California and Pike's Peak Express Company. The route passed through Fort Kearney, Laramie, Bridger, Salt Lake City, Camp Floyd, Carson City, Placerville, and Sacramento to San Francisco. On April 3, 1860, one messenger of the Pony Express was to leave St. Joseph and another to leave San Francisco at the same time, one going west and the other east.

About this time we find the following advertisement in some of the papers of the country: "To San Francisco in eight days by the C. O. C. & P. P. Ex. Co. The first courier of the Pony Express will leave the Missouri River on Tuesday, April 3d, and will run regularly each week hereafter, carrying a letter mail only."

Celebrating the start. Tuesday, April 3, was a great day in St. Joseph, Missouri. An immense crowd gathered before the post office in the evening and listened to speeches. At half-past seven, the pouch containing forty-nine letters and five telegrams for California was brought out and fastened to the saddle of the pony by the mayor of the city. Amid shouts and cheers from the crowd, the rider mounted and galloped away on one of the most important journeys in our country's history. The first one hundred and forty miles were made in thirteen hours. According to their schedule Fort Kearney must be reached in thirty-four hours, Carson City in one hundred and thirty-eight hours, and San Francisco in two hundred and forty hours.

Galloping into California. As the first overland Pony Express mail from the east drew near to the Pacific coast, there was great rejoicing in the towns through which it passed. Guns were fired and speeches made. When the rider reached Sacramento, the legislature adjourned in honor of the event, and shops and houses were gaily decorated with flags and banners. The whole city turned out with bells, guns, bands, and

flags, and lined the streets along which the rider must pass. At five o'clock in the afternoon of April 13, he came galloping forward, followed by a wild band of horsemen who had met him out on the plains. Bells were rung, cannon were fired, and a multitude of people shouted a royal welcome to him.

From Sacramento the pony rider went by steamboat to San Francisco. Here he also met a hearty welcome. Bands paraded the streets, bonfires blazed about the city, and firebells were rung. This last brought out the fire companies, and when they found no fire, they remained to celebrate and joined the procession. The express was escorted from the dock on the river to the office of the Alta Telegraph, which was the western station.

When the service was put in perfect working order, there were one hundred and ninety stations, two hundred station-keepers, eighty riders, and from four hundred to five hundred horses along the route, 1950 miles long, between St. Joseph and Sacramento.

The riders. All the riders of the Pony Express were young men chosen for their light weight, courage, and good judgment. They wore no uniforms, but dressed as their fancy directed. The usual costume was the buckskin hunting shirt, with cloth trousers which were tucked into a pair of high boots, and a jockey cap or slouch hat. All rode well armed. At first, each carried a Spencer rifle across his back and two Colt revolvers in his belt.

The horses were equipped with a light riding saddle

and bridle, and with saddle bags called mochila, which were made of heavy leather. These had holes in them so that they would fit over the horn and tree of the saddle. There were four pockets to hold the mail, one in each corner, making one in front of and one behind each leg of the rider. Three of these pockets were locked and opened only at military posts and at Salt Lake City. The fourth pocket was for the mail gathered up along the way.

Each station-keeper had a key, and the bag contained a time card on which the station-keeper made a record of the time of arrival and departure. The mail bag was quickly transferred from pony to pony and from rider to rider until it was carried from one end of the long line to the other.

The letters were wrapped in oiled silk to protect them from moisture. Each rider was permitted to carry twenty pounds of mail. At first there was a charge of five dollars for each letter weighing one half ounce or less. This was later reduced to two dollars and fifty cents for each letter. Light-weight paper was made especially for this letter writing so as to reduce the weight and expense. From New York the charge was six dollars and ninety cents for a letter of ten words.

The stations. The stations were located twenty-five miles apart, and each rider was expected to cover three stations, or seventy-five miles, a day. It was found that the horses could not go at full speed for a distance of twenty-five miles. Each station was in charge of a station-keeper who took care of the relays

of horses, and had a pony ready bridled and saddled half an hour before the express was due.

When the rider approached a station in daytime he was seen by the station-keeper, and at night he gave a signal by which he was known. As he came near the station he loosened the mochila from his saddle so that he could leap from his pony the moment he arrived, throw the bags over the saddle of the fresh horse, mount, and be off. Two minutes was the time allowed at stations, whether it was to change riders or horses. Where the riders were changed, the incoming man unbuckled his mochila before arriving and handed it to the next rider, who was off at a gallop as he grasped it.

Hard rides. The riders usually rode seventy-five miles over the west-bound trail one day and returned the same distance eastward on the following day. Sometimes, on account of an accident, a rider might have to double his journey. Buffalo Bill (W. F. Cody), who rode from Red Butte, Wyoming, to Three Crosses, Nebraska, a distance of one hundred and sixteen miles, found on reaching his station, on one occasion, that the rider for the next division had been killed the night before. So he was called upon to ride another seventy-five miles without a break, except for meals and to change horses.

The riders were regarded as great heroes along the route. They were expected to be ready in all kinds of weather, winter or summer, amid rain or snow, to cross plains, swim rivers, or pass over the burning desert —

anything to make their beat on time. They took much pride in getting in ahead of schedule time. Though they were armed with the best weapon of those days, the Colt revolver, they were not expected to take time to fight, but to run away. Their guns were to be used only in case of emergency. First-class horses were furnished them, and this is the reason why so few riders were killed by the Indians, whose horses were poor in comparison. More station-keepers than riders were massacred by the Indians.

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COLONEL WILLIAM F. CODY

"Lincoln is President!" The greatest event of the Pony Express service occurred in 1861 just after President Lincoln was inaugurated. As the whole country was deeply interested in Lincoln's inaugural address, the Pony Express wished to deliver it in California in the shortest time possible. To increase the speed, fresh horses were led out from the different stations to meet the riders. Each horse averaged ten miles an

hour, and went at a swift gallop. The mail was carried across the continent from St. Joseph to the coast in seven days and seventeen hours. The distance from St. Joseph to Denver, six hundred and sixty-five miles, was made in two days and twenty-one hours. The last ten-mile stretch was run in thirty-one minutes.

Questions and Problems

1. What was the Pony Express?
2. Trace the route on a map.
3. What do you think was the purpose of celebrating the first overland Pony Express from the east to the Pacific coast?
4. Of what use was this Pony Express to the whole country?
5. Give reasons why you would or would not like to have been a rider on the Pony Express.
6. Who was Buffalo Bill?

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 196–200; Ginn and Company.

Paxson, F. L. — *The Last American Frontier*, pp. 174–191; The Macmillan Company.

CHAPTER XL

THE TELEGRAPH AND TELEPHONE

Sending news by signals. When the Erie Canal was completed in 1825, there was no telegraph nor telephone. The quickest way of sending a message was by means of signals. The Indians often used a method of signaling by building fires at night on the hill tops and by columns of smoke by day.

There were two men who discovered how to use electricity in sending messages. These men were Samuel F. B. Morse, who first worked out the telegraph code, and Alexander Graham Bell, who made the first telephone. These men first sent their messages by a wire that carried electricity. Not many years ago a still more wonderful discovery was made by Marconi, who invented the wireless telegraph, and now we have the radiophone. Since swift communication has been of such importance to our country, you will be interested in knowing how these inventions came about.

Samuel Morse. When Samuel Morse was young he was fond of drawing pictures. When he became a man he learned the art of painting, and went to France with some other American artists. While there he was interested in getting his letters to America, and having the replies come back, as quickly as possible, but this

was very slow. He began to wonder how messages might be sent more quickly. He knew how the cannon had been used at the opening of the Erie Canal, and that sound would travel a mile "while you are counting five." But he said: "If electricity or lightning could be used, it would carry the signal more quickly than sound. Electricity will travel a thousand miles while you count one."

Signals by electricity. So Morse began in 1832 to think out a plan for sending signals by electricity. While he was teaching in a university in New York he put up a wire in one of the rooms in the building and sent electricity through it. To the end of the wire was fastened a pencil in such a way that the current made the pencil mark. "Now," said Morse, "if I can make a pencil do this over a mile of wire, why can I not do it over a hundred miles or a thousand miles?"

By 1837, he had worked out his code of signals and was ready to take out a patent for it. Like most inventors Morse was a poor man and lacked the money to try his experiments. He lived for a time in a little room by himself, where he ate, slept, and worked. About this time, he met a young man named Alfred Vail, whose father was a judge. Young Vail was interested in Morse's plan and persuaded his father to lend him two thousand dollars, with which he became Mr. Morse's partner in working upon the telegraph. At last Vail made a model at his own expense and had it patented in Professor Morse's name.

The code alphabet. They worked out an alphabetical code using dots and dashes for different letters of the alphabet. The dot was simply a clicking sound and the dash was the space of time between two clicking sounds. The dots were made by closing and breaking the current or circuit by means of a key or button. If you pressed upon the key and immediately removed your finger there was a sharp click, called a dot, heard at the other end of the line. Now, a single dot, according to Morse's code, was the letter "e." If you pressed the key and held it down for a moment you made what was called a dash, or the letter "t." In this way, by means of dots and dashes, any letter of the alphabet could be sent instantly a thousand miles or more.

Asking Congress for money. As Morse had no money he asked Congress to aid him by furnishing thirty thousand dollars with which to build a telegraph line between Washington and Baltimore. Many members of Congress laughed at the idea, saying they might as well give Mr. Morse the money to build a railroad to the moon. Day after day and week after week passed by while Morse waited, hoping the bill might pass. At last he became discouraged, for Congress was to adjourn and nothing had been done for him. On the last day of the session, he remained in the Senate Chamber until ten o'clock at night and then went home in despair, as nothing had been done and Congress was to adjourn at midnight.

Just before Congress adjourned, however, the bill

was passed, and the next morning a young lady came to tell Morse the good news. He could hardly believe it, for he said he had stayed until ten o'clock and nothing had been done; but she assured him that Congress had voted the money just before the clock struck twelve.

The first line built. Morse and Vail now hastened the great work of building the telegraph line between the two cities. It was completed in 1844, and was ready for trial. The instrument was a clumsy one indeed. The receiving apparatus weighed one hundred and eighty-five pounds and two strong men were needed to handle it. You have no doubt seen the neat little instrument in use to-day. It need not weigh more than four ounces and could be carried in one's vest pocket.

From an old print

MORSE AND HIS TELEGRAPH MACHINE

The first message sent over the wire were these words taken from the Bible: "What hath God wrought." For many months there was no charge for sending messages over this wire, and then a small charge was made — one cent for a short message. On a certain day, we are told, there

was but one message sent, and so the receipts for that day were one cent.

Creighton's plans. Though there had been talk of a railroad to the Pacific for many years and surveys had been made along several routes, the telegraph wires were stretched across the country before the iron rails could be laid. Edward Creighton began a survey in 1860 for telegraph lines from the Missouri River to the Pacific. Creighton made the journey in an overland stagecoach from Omaha to Salt Lake City, meeting cold and storms on the way, and being in constant danger from robbers and Indians. From Salt Lake City he pushed on across the alkali desert on horseback to Sacramento, where he interested the California Telegraph Company in his plans. That company undertook to stretch wires eastward from Sacramento to meet the lines that Creighton meant to stretch westward from Omaha. Meantime, the government offered a prize of forty thousand dollars a year to the company that could first stretch the lines across our new west.

Stringing the wires. Creighton began at Omaha digging his postholes and stringing his wires toward the west, and the California Company rushed its work eastward, each hoping to capture the government's prize. Salt Lake City was the goal, and the company that reached that point first was the victor. From Omaha to Salt Lake City the distance was about four hundred and fifty miles farther, but the difficulties at both ends of the route were about equal. Creighton

completed his line on October 17, 1861, and the California Company dug its last hole one week later. When the first message was flashed over the wires another step was made in binding our country together in a firm union.

Indians destroy wires. The Indians soon found out that those humming wires carried messages that called for help, so that soldiers knew where to go and could respond quickly to the call. As the Indians meant to keep the white man back from their territory, they tore down the wires by throwing their lariats over the line and then putting their ponies to a gallop. If this did not destroy the wires, they cut down the poles with their tomahawks. Just before the Indians carried on a raid, they destroyed the wires, so that the outside world might know nothing of what was going on.

The buffaloes and the poles. It is said that even the buffaloes conspired against this encroachment on their grazing land. They rubbed the telegraph poles and sometimes pushed them over by scratching their sides against them. The company tried to prevent this destruction of poles by driving sharp spikes into them. But this only pleased the buffaloes so much the better, as the spikes combed deeply into the shaggy hair and gave pleasant sensations to their tough hides.

Wonderful results. There are now many millions of miles of telegraph wire in our country and tens of thousands of messages are sent every day. Mr. Morse made the people all over this land close neighbors by

enabling them to send a message and get a reply in a few hours.

The telephone. Another invention that helped to tie the frontiers of the country together was the telephone. About fifty years ago a poverty-stricken teacher of deaf-mutes in Boston named Alexander Graham Bell was trying to find a way of sending the different sounds of the human voice over wires.

ALEXANDER GRAHAM BELL

He made a toy telephone. For forty long weeks this instrument could only gasp and make strange noises. But March 10, 1876, was a thrilling day for the inventor. Mr. Bell was in his work room calling into his crude transmitter, while his helper, Watson, was at the lower end of the wire in the basement. As he held the receiver he heard Mr. Bell say distinctly over the wire, "Mr. Watson, come here, I want you."

Watson dropped the receiver and rushed, wild with joy, up the three flights of stairs to tell the glad news to Bell. "I can hear you!" he shouted, "I can hear the words!"

In June of that year Bell visited the Centennial Exposition at Philadelphia, taking with him his model telephone. His friends urged him to put it on exhibition. The judges were about to refuse it when Dom Pedro, Emperor of Brazil, entered the room. The Emperor had examined Bell's telephone in the school at Boston and remembered the young inventor. He shook hands with him and asked if he might not try the telephone again. That changed the minds of the judges. The "toy" was placed on exhibition and proved to be a star exhibit. Everyone who could understand what it meant praised it.

The next year telephone lines were built and people heard speech twenty miles away. Then long-distance lines were constructed. The first telephone message from New York to Chicago was sent in 1892. Longer distances were covered, until in 1915 New York merchants were able to transact business over the telephone with customers in San Francisco. Thus another step was taken in bringing the frontiers of our country closer to the capital.

Questions and Problems

1. Find out all you can about Samuel Morse and give a report of your findings to your class.
2. Tell about the Morse code.
3. Which do you think the more important invention—the telegraph or the steamboat? Give reasons for your answer.
4. Tell about the first transcontinental telegraph.

5. Write three questions about the telephone which are to be answered in class.

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 290–294; Ginn and Company.

Mowry, W. — *American Inventions and Inventors;* Silver Burdett and Company.

CHAPTER XLI

THE UNION PACIFIC AND THE CENTRAL PACIFIC RAILROADS

Railroad to the Pacific. After California had become a state, the people all over the country were eager to have a railroad built across the Rockies to connect the east with the west. The members of Congress were bent on seeing such a railroad built. Uncle Sam did not wish to build it himself, but he was willing to give thousands of acres of land to anyone who would undertake this tremendous task.

Need of close ties with the west. Before the coming of railroads and fast mail trains, the people of Salt Lake City, Virginia City, Boise, or Helena received their eastern mail once a month, while some settlements had mail only twice a year. There were many needs for a railroad across the Rockies to the Pacific. The settlers along the way needed protection from the warlike Indians, who were now fighting every step that the white man was making toward their favorite hunting grounds.

The settlers wanted better means of travel than that afforded by oxen, mules, or burros, and the government feared that unless the west were bound to the east by the iron road and the telegraph, our western

states might break away from the Union, as the Mississippi Valley states had once threatened to do. While Congress was still talking about the great project, the Civil War broke out between the north and the south. Then the north saw how much it needed a railroad to California to transport armies and supplies from the west to the east.

Two companies agree. At length, in 1864, Congress offered such a vast grant of land to whoever should undertake the task, that two companies agreed to build a railroad from Omaha, Nebraska, to San Francisco. One company, the Central Pacific, was to start from San Francisco and build eastward, while the Union Pacific was to begin at Omaha and lay their tracks westward until the two railroads should meet. There was much rivalry between the two roads to see which would complete its part of the task first.

The Central Pacific's task. The Central Pacific had to get its iron, its supplies, and machinery by way of the sea. They were brought to San Francisco by ship around Cape Horn, or by way of the Panama railroad, and from there by water. The Sierra Nevada Mountains furnished them the timber for ties, trestle work, and snowsheds; but it was a stupendous task to build a road across these mountains where so many great tunnels had to be dug. Then there was the desert to cross with neither wood nor water at hand for hundreds of miles.

The Union Pacific's task. When the Union Pacific started building at Omaha, it had no connection by

rail with the east. It was forced to get its supplies overland by wagon from the ends of railways in Iowa or to depend upon boats on the Missouri River. The large engine used by the Union Pacific railway shops was dragged across the country from Des Moines to Omaha. The Union Pacific had little or no timber along its line for many hundreds of miles, except the cottonwoods of the flat valley, and these could not be used for ties. Many boats were kept busy for a hundred miles above and below Omaha on the Missouri River, furnishing ties and heavy timbers.

Labor for the roads. Both roads were built through regions which were unpeopled and which could furnish no food for the thousands of laborers needed. About twenty-five thousand men were at work on these two roads. Chinese laborers were used on the western end and Irish laborers on the east. The close of the Civil War sent many soldiers, laborers, and teamsters who had been in the service west to take part in the railway building. It was fortunate that the men knew how to fight, for the Indians were troublesome, and it was necessary that a gang of track layers should carry their guns with them. One leader said, "We marched to work to the tap of the drum, with our men armed. We stacked our arms on the dump and were ready at a moment's warning to fall in and fight for our territory." One track-train could supply guns for a thousand men at a word.

Building the Union Pacific. One party called the advance guard went ahead and staked the line of the

Union Pacific road. Following them came a second company, who cut through the gorges, graded the road, and built the bridges. Then followed the main army of laborers, placing the ties, laying the track, spiking down the rails, and completing the road for the use of train service.

The farthest limit of track was occupied by a long train of box cars with bunks built within them, hammocks swung, and beds spread on top. Here the builders of the great iron highways took their meals and slept at night. Close behind this housing train came cars loaded with ties, spikes, and rails to be dumped off upon the roadside for the track layers.

The only settlements between Omaha and Sacramento in 1862 were those made by the Mormons in Salt Lake City and a few mining camps in Nevada and Colorado, one of which was Denver. As fast as the road was built, new settlements grew up with headquarters at convenient places. There were North Platte, Kearney, and Cheyenne. A town of three thousand people would grow up in two weeks. Ready-made houses were shipped in from the east, all parts marked and numbered, so that half a dozen men could erect a block of them in one day, while two boys with screw drivers could put up a house in three hours. When the army of workers moved on, these buildings could be taken down and shipped ahead to some other growing center.

The Central climbs the mountains. The Central Pacific pushed eastward as rapidly as possible, and

was at the summit of the Sierra Nevada Mountains, one hundred and five miles east of Sacramento, by the autumn of 1867. The builders had climbed to a height of seven thousand feet above the sea level. There were fourteen tunnels to be dug through these mountain tops, the longest of which was one-third of a mile long. They did not wait for these tunnels to be completed, but hauled iron, supplies, and even locomotives over the mountains, and went ahead with the track laying, leaving the short sections to be connected when the tunnels were completed.

The meeting. Meantime the Union Pacific was pushing rapidly over the level western plains, and boasted that its track would reach the Sierra Nevada Mountains before the Central had crossed them, but the boast was not made good. Both companies were rushing madly because each mile of road covered brought them nearer to winning the prize of land given by Congress, which was worth $60,000 or more. The Central Pacific completed its task first.

In 1869 the two roads met not far from Ogden, in Utah. A celebration was arranged for the building of the last one hundred feet of track. Governor Stanford of California and other noted men came from the west, while others arrived from the east to celebrate the laying of the last rail. Laborers from both sections quickly laid the ties and rails, and all was done but the "last spike."

Telegraph wires were so connected with this spike that each stroke on it was reported instantly by tele-

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TRAVELERS ARE CARRIED SAFELY OVER THE MOUNTAINS BY TRAINS

graph to most of the great cities in the country. This wonderful spike was made of gold and presented by California. Nevada had sent a silver sledge to drive it in. As Governor Stanford drove this last spike into place the people cheered, the locomotives whistled, and the bands played. Then the Central Pacific train steamed across the junction and back again. Following this the Union Pacific train passed over the point of junction and back.

San Francisco celebrated with cannon, steam whistles, and bells, and other cities along the route took a holiday. In New York, the Mayor ordered a salute of one hundred guns in honor of the great event. In spite of great rugged mountains and wide parched deserts, the Pacific states were at last bound to the rest of the Union by these iron rails.

It was not long till other railways, such as the Northern Pacific, the Great Northern, the Santa Fe, and the Southern Pacific were extending their lines to the western coast. It was these railways that aided greatly in the development of the west.

Questions and Problems

1. Why was there need of a railroad to the Pacific?
2. Describe the building of the railroad.
3. Which was of more importance to the country in its early development, the Erie Canal or the Union Pacific Railroad? Give reasons for your answer.
4. Name and trace on a map the most important modern railroads to the Pacific.

5. If any member of the class has been across the continent, let him tell about the trip.

Books to Read

Faris, J. T. — *Real Stories from Our History*, pp. 283–289; Ginn and Company.

Paxson, F. L. — *The American Frontier*, pp. 211–221; The Macmillan Company.

CHAPTER XLII

UNITING THE WEST WITH THE EAST

Settling the West. In the last fifty years, the time for transportation between the east and the west has been notably shortened. After the building of the railroads, settlers came steadily to the mountain states and the Pacific coast. The even climate of the west produced magnificent orchards and refrigerator cars carried fruit to eastern markets. Gold seeking gave way to the building of great dams and reservoirs to store water, and by irrigation acres of sandy desert were reclaimed for the raising of grain and alfalfa.

The mission stations on the coast grew to prosperous cities with a great demand for eastern manufactures. From San Diego to Seattle, the coast developed rapidly. As far inland as the mountain states, irrigation and mining and herding provided occupation for enterprising settlers, some of whom had traveled three thousand miles from the east to the west.

The Panama Canal. From one coast to the other by rail was a week's journey and freight rates were high. Following the settlement of the Pacific states and the increasing interchange of products there came a demand for a shorter water route between the east and the west.

From San Francisco to New York by way of Cape Horn is fourteen thousand miles. This distance by water could be shortened to less than five thousand miles by building a ship canal across the Isthmus of Panama. Not only would shipping rates thus be reduced but United States Navy vessels as well as merchant ships would be able to reach one coast from the other more quickly.

Panama was for a long time part of Colombia, so our government offered Colombia ten million dollars in cash and a yearly rental of two hundred and fifty thousand dollars for a strip of land across Panama. Colombia refused this offer, hoping to get a larger sum. Then the people of Panama, fearing the United States would build the canal across Nicaragua, declared their independence and set up a government of their own. President Roosevelt promptly made a treaty with this new government of Panama and secured (on the same terms offered Colombia) a strip of land ten miles wide for a canal.

At last the way was open to build the canal. The United States first set to work to make Panama a healthful place in which our men could work. Its cities were cleaned up, the swamps were drained, and yellow fever was driven out.

Thousands of men began to dig with steam plows. Starting from the Atlantic Ocean, the canal runs at sea level for eight miles. Then an immense dam turns a river valley into a lake twenty-two miles long, and ships of the largest size are lifted to the level of this

lake by means of the famous Gatun locks. After proceeding across the lake and through Gaillard Cut they are lowered by other locks near the Pacific Ocean to sea level.

The Panama Canal is one of the greatest feats of en-

Photo by Elmendorf. © *Ewing Galloway*

GAILLARD CUT, PANAMA CANAL ZONE

gineering skill in the world. It has vastly increased the efficiency of our Navy by enabling ships to pass in a few days from coast to coast. It brings New York and San Francisco eight thousand miles nearer by sea than

they were before and it has greatly lowered freight rates between the coasts. Thus are our national frontiers united by the sea.

Automobile travel. About the year 1895 a number of inventors were beginning to make automobiles. The machines were crude and they were also very expen-

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ONE OF THE FIRST AUTOMOBILES, BUILT IN 1894

sive. But the work of many minds made improvement rapid and with a decrease in cost automobiles came into popular use. The millions of machines bought by Americans has brought cities throughout the vast territory of the United States closer together and made available to farmers the many advantages of city life.

With the increased use of automobiles came a demand for hard smooth roads. Millions of dollars were spent by every state until a network of boulevards and paved highways spread across the continent. For the people traveling by motor car, many cities provided camps with running water and other conveniences, and hundreds came by automobile to the western coast to make a home there. Great trucks carried produce from one region to another. Automobile stages shuttled from city to city, competing with the railroads.

Every year produced improved methods of shortening time for transportation and provided new facilities for exchanging the products of one region for those of another. This travel and trade, together with the opening of great irrigation projects, brought thousands of new settlers to the western states.

The airplane. The first airplane to fly successfully was built by the Wright brothers. Orville Wright flew for twelve seconds on December 17, 1903. This was followed by longer flights, and during the World War the airplane developed tremendously. Battles were fought in the air and aviation became an established branch of each nation's service.

The early machine was fitted with an engine of sixteen horsepower, and flew about thirty-five miles an hour. In a few years aircraft were fitted with engines having fifteen hundred horsepower and flying at speeds of over two hundred miles an hour. Crossing the United States by airplane in two days, with mail or passengers, makes our great land a very narrow

country. In 1923 the first non-stop record flight from New York to San Diego was made in twenty-seven hours by Lieutenants Macready and Kelly. Airplanes had crossed the Atlantic Ocean before this date. Travel by air is the speediest of all transportation and

LATEST MODEL OF AIRPLANE

in time the atmosphere promises to become the great ocean of travel.

The wireless. In 1901 came reports that Marconi with his invention of the wireless telegraph had sent messages across the ocean. Marconi came to America very quietly in December with two assistants. He set up his instruments at St. John's, Newfoundland, and after several attempts sent up a kite about four hundred feet in the air. Before he left England he

had arranged that at a certain time in the day the letter S represented by three dots should be sent to him from there by aerial wires pendant from masts 210 feet high. When he had his kite ready he cabled his assistants to begin sending.

Photo by Brown Bros.

MARCONI AND ONE OF HIS FIRST WIRELESS MACHINES

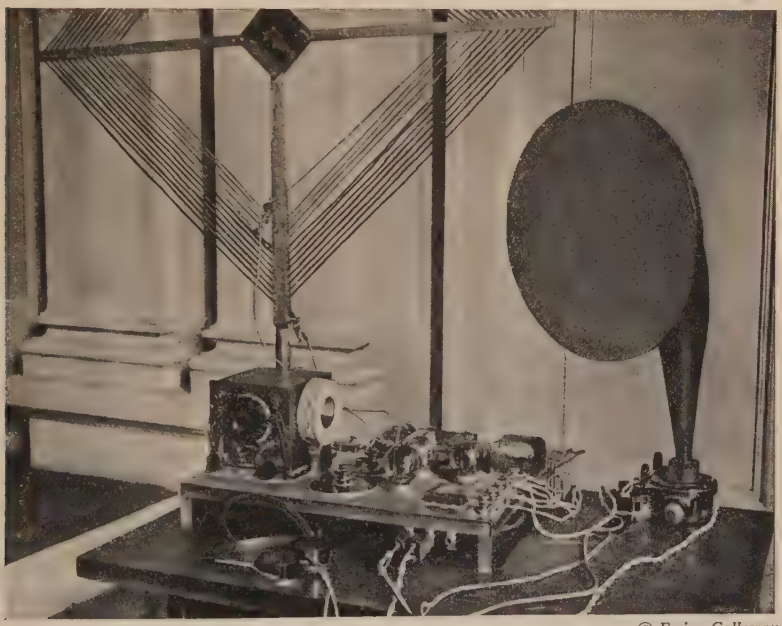
At noon, December 12, 1901, Marconi sat waiting with a telephone receiver at his ear. His receiving instrument was on the table and a wire ran out the window to a pole and upward to the kite. Only Kemp was with him. For nearly half an hour nothing was heard. Presently Marconi said, "Mr. Kemp, see if you can hear anything."

Kemp took the receiver and heard the three little dots of the letter S tapped out in England. Over and over again they heard the signals. The long-distance wireless telegraph was a success.

During the World War, great wireless stations were built in many parts of the United States and it was soon possible to send messages from coast to coast.

The radio telephone. Upon the heels of this splendid step forward came another, the radio telephone.

People in the most remote places are now able to "listen in" to speeches from the President at Washington or concerts from New York. Thus the citizens of our



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A RADIO SHOWING THE AMPLIFIER

broad land are in constant touch with the whole country by radio. There are no longer in America any *distant* frontiers.

Our Journey's End

And now we have followed the hardy American pioneer across the continent; we have helped him to explore its rivers, plains and mountain passes; we

have seen him conquer the wilderness and lay the foundation of our glorious nation. Has it not been an interesting journey? Perhaps you will agree that we should give the pioneer a prominent place in our list of heroes in American history.

Questions and Problems

1. Why was there a demand for a canal at Panama?
2. Show how the automobile has affected the west.
3. What effect do you think air travel will have upon the west?
4. How will the radio telegraph and radio telephone aid the west?
5. Let each pupil choose from this chapter a topic for further reading and report.
6. Have you enjoyed reading this book? Give reasons for your answer.

Books to Read

Nida, S. H. — *Panama and Its Bridge of Water;* Rand McNally.

Wade, M. H. — *The Light-Bringers;* Little, Brown and Company.

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